

Supplementary Appendix

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3 This appendix has been provided by the authors to give readers additional
4 information about their work.

5

6 Supplement to: Mashe T, Domman D, Tarupiwa A, et al. Highly drug-
7 resistant cholera outbreak strain in Zimbabwe, 2018 – 2019.

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26 **METHODS**

27

28 **Bacterial isolates**

29 Samples were collected at health care facility, processed at district health centers,
30 then through the public health laboratory network, isolates were sent to the National
31 Microbiology Reference Laboratory, Harare for quality control and further analysis.
32 An isolate (#YA00120881) recovered from a South African citizen returning from
33 Zimbabwe with cholera was provided by the Centre for Enteric Diseases, National
34 Institute for Communicable Diseases, South Africa and included in this study. The
35 identification of *V. cholerae* was confirmed using the VITEK-2 COMPACT 15
36 automated microbial identification system (bioMérieux, Marcy-l'Étoile, France). Sero-
37 grouping and serotyping was determined via the slide agglutination method with
38 polyvalent antisera and mono-specific Inaba and Ogawa antisera (Mast Group Ltd,
39 Bootle, United Kingdom).

40

41 **Antibiotic susceptibility testing**

42 The following antibiotics were used for disk diffusion method: tetracycline (30 µg),
43 cotrimoxazole (25 µg), ciprofloxacin (5 µg), ampicillin (10 µg), ceftriaxone (30 µg),
44 and chloramphenicol (30 µg) (Oxoid, United Kingdom). The minimum inhibitory
45 concentrations (MICs) of ampicillin, amoxicillin/clavulanate, ceftriaxone,
46 trimethoprim/sulfamethoxazole, chloramphenicol, nalidixic acid, ciprofloxacin,
47 tetracycline, kanamycin, streptomycin, meropenem and azithromycin were
48 determined using the E-test method (bioMérieux) on the 13 isolates selected for
49 whole-genome sequencing. The Clinical and Laboratory Standards Institute (CLSI)
50 interpretative criteria for antibiotic susceptibility testing of *Vibrio* spp. (M45 document)

51 were used when available.¹ For ceftriaxone, kanamycin, nalidixic acid, and
52 ciprofloxacin, the interpretative criteria for *Enterobacteriaceae* / *Salmonella*
53 spp. (M100-S27 document) were used.² Interpretive criteria for streptomycin, not
54 available both in M45 and M100 documents, was used as follow: susceptibility ≤16
55 mg/L and resistance ≥32 mg/L. The presence of extended-spectrum β-lactamase
56 (ESBL) activity was investigated by means of the combination disk methodology
57 (double disk synergy test); ceftazidime (30 µg), cefotaxime (30 µg) and cefpodoxime
58 (30 µg) alone and ceftazidime & cefotaxime in combination with clavulanate (10 µg)
59 was used, as per CLSI guidelines.² Disks were manufactured by the Mast Group Ltd,
60 Bootle, United Kingdom.

61

62 *Escherichia coli* ATCC 25922 and *Klebsiella pneumoniae* ATCC 700603 were used
63 for internal quality control purposes.

64

65 **Whole-genome sequencing (WGS)**

66 Genomic DNA was isolated from bacteria using a Qiagen QIAamp DNA Mini Kit
67 (QIAGEN, Hilden, Germany) and sequenced using an Illumina MiSeq (Illumina, San
68 Diego, CA, USA). DNA libraries were prepared using a Nextera XT DNA Library
69 Preparation Kit (Illumina), followed by 2 x 300 paired-end sequencing runs, yielding a
70 mean of 70-fold coverage (minimum 36-fold, maximum 104-fold). Short-read
71 sequence data were submitted to the European Nucleotide Archive (ENA)
72 (<http://www.ebi.ac.uk/ena>), under study accession number PRJEB32770, and the
73 genome accession numbers are provided in Table S5.

74

75

76

77 **Additional genomic data**

78 Raw sequence files from 1,188 7PET genomes described in Weill *et al.*³ were
79 downloaded from the ENA and included in this study (Table S5). Twelve
80 assembled genomes also described in Weill *et al*⁴ were downloaded from
81 GenBank (Table S5) and included in this study. 100 bp overlapping simulated
82 reads were generated from the 12 assembled genomes by using `fasta_to_fastq.pl`
83 (https://github.com/ekg/fasta-to-fastq/blob/master/fasta_to_fastq.pl).

84

85 **Genomic sequence analyses**

86 Paired-end reads and the simulated paired-end reads were mapped to the
87 reference genome of *Vibrio cholerae* O1 El Tor N16961 (GenBank accession
88 numbers LT907989 and LT907990) using Snippy v4.1.0/BWA-MEM v0.7.13
89 (<https://github.com/tseemann/snippy>). Single nucleotide variants (SNVs) were
90 called using Snippy v4.1.0/Freebayes v1.1.0 (<https://github.com/tseemann/snippy>),
91 requiring a minimum mapping quality of 60, a minimum base quality of 13, a
92 minimum read coverage of 4, and a 75% read concordance at a locus for a variant
93 to be reported. An alignment of core genome SNVs was produced in Snippy v4.1.0
94 to infer a phylogeny.

95

96 Short reads were assembled with SPAdes version 3.1.0.⁵

97

98 The various genetic markers were analyzed with BLAST version 2.2.26 against
99 reference sequences of the O1 *rfb* gene, *ctxB*, *wbeT*, as well as the whole locus of
100 VSP-II, as previously described.⁴

101
102 The presence and type of acquired antibiotic resistance genes (ARGs) or ARG-
103 containing structures were determined with ResFinder⁶ version 3.1.0
104 (<https://cge.cbs.dtu.dk/services/ResFinder/>), BLAST analysis against GI-15, Tn7,
105 and SXT/R391 integrative and conjugative elements⁴, PlasmidFinder version 2.0.1
106 (<https://cge.cbs.dtu.dk/services/PlasmidFinder/>).⁷ The presence of mutations in the
107 genes encoding resistance to quinolones (*gyrA*, *parC*), resistance to nitrofurans
108 (*VC_0715* and *VC_A0637*), or restoring susceptibility to polymyxin B (*vprA*) was
109 determined manually on *de novo* assembled sequences using BLAST.³

110

111 **Phylogenetic analysis**

112 Repetitive (insertion sequences and the TLC-RS1-CTX region) and
113 recombinogenic (VSP-II) regions were masked from the alignment.⁴ Putative
114 recombinogenic regions were detected and masked with Gubbins version 2.3.4.⁸ A
115 maximum likelihood (ML) phylogenetic tree was built from an alignment of 9,935
116 chromosomal SNVs, with RAxML version 8.0.20 under the GTR model with 200
117 bootstraps.⁹ The final tree was rooted on the A6 genome, and visualized with R
118 version 3.3.2 or FigTree version 1.4.2 (<http://tree.bio.ed.ac.uk/software/figtree/>). To
119 visualize the pattern of geographical spread along the resulting phylogenetic tree,
120 we used stochastic mapping as implemented in the R package phytools version
121 0.6-60. Continent of origin was treated as a discrete character trait for tree tips,
122 and the *make.simmap* function of phytools was used to model the evolution of this
123 trait on the tree using a continuous-time reversible Markov model, as previously
124 described.³

125

126 BEAST¹⁰ version 1.10.4 was used to estimate time-resolved phylogenies using a
127 representative subset of genomes described previously³ with the addition of 11
128 genomes from the Zimbabwe 2018 outbreak for a total of 92 genomes. BEAST
129 was run on an alignment of 418 variable sites under the GTR nucleotide
130 substitution model with the uncorrelated relaxed clock (lognormal distribution of
131 rates) and Bayesian skyline coalescent tree prior. We ran three independent
132 Markov chain Monte Carlo (MCMC) chains over 50 million steps, while sampling
133 every 5,000 steps. We combined chains after discarding the first 50,000 steps in
134 each chain and sampling every 10,000 steps. The effective sample size (ESS) for
135 all estimated parameters was greater than 200. We visualized the maximum clade
136 credibility tree (median node heights) using the R package *ggtree*.¹¹

137

138 **Plasmid sequencing**

139 Genomic DNA was isolated from *V. cholerae* O1 isolate YA00120881 using a Qiagen
140 QIAamp DNA Mini Kit (QIAGEN, Hilden, Germany), as per manufacturer's
141 instructions. PacBio sequencing libraries were prepared as follows. Five µg of
142 genomic DNA was sheared to approximately 10,000 bp fragments by centrifugation
143 at 5200 rpm in a gTUBE (Covaris Inc., Woburn, MA, USA). DNA was repaired with
144 damage repair reagent and end-repaired using end repair mix before ligation to
145 PacBio blunt end barcoded adapters (20 µM). Unligated material was digested with
146 Exo III and Exo VII; then library fragments purified via two consecutive Ampure size
147 selection clean-ups. The resulting average insert size was 13 kb as measured on an
148 Agilent 2200 TapeStation instrument (Agilent Technologies, Santa Clara, CA, USA).
149 Sequencing primers V3 were annealed to the hairpins of the SMRTbell templates
150 followed by binding with the Sequel Polymerase 2.1 (Pacific Biosciences, Menlo

151 Park, CA, USA). One SMRT cell was run on the PacBio Sequel system with an on-
152 plate concentration of 4 pM using Sequel chemistry V2 and a 10-hour movie time.
153 Assembly of genomic data involved assembly of PacBio raw reads together with
154 Illumina reads, using Unicycler version 0.4.8-beta software
155 (<https://github.com/rrwick/Unicycler>).

156

157 Automatic annotation was performed with the RAST¹² server (<http://rast.nmpdr.org/>),
158 followed by manual inspection and correction. The plasmid was visualized with
159 BLAST Ring Image Generator (BRIG)¹³ version 0.95
160 (<http://sourceforge.net/projects/brig/>).

161

162 Sequence data of the pYA00120881 plasmid have been deposited in GenBank
163 (<https://www.ncbi.nlm.nih.gov/genbank/>) under accession number MT151380.

164

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166

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- 199
- 200
- 201

202 **Figure S1.** Daily number of suspected cholera cases in Zimbabwe during the 2018 -
203 2019 outbreak.

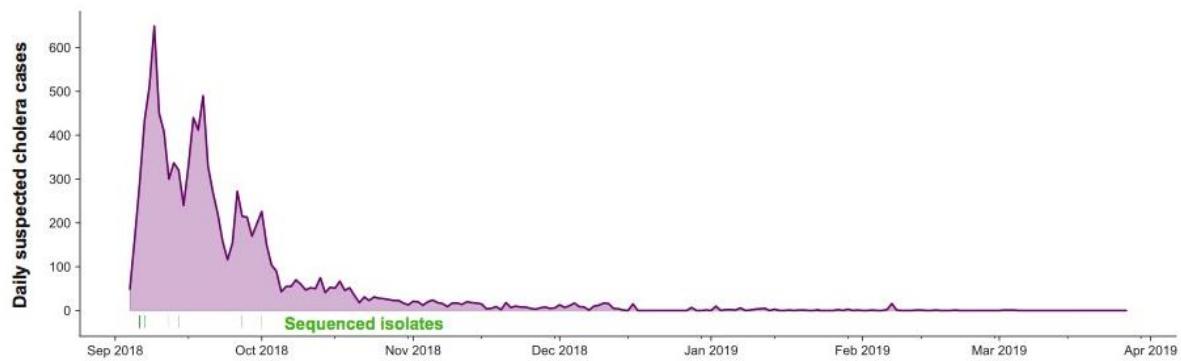
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214 The first cases presented on 6 September 2018 and the outbreak ended on 26 March
215 2018. The dates of the isolates sequenced in this study are shown under the epidemic
216 curve.

217

218

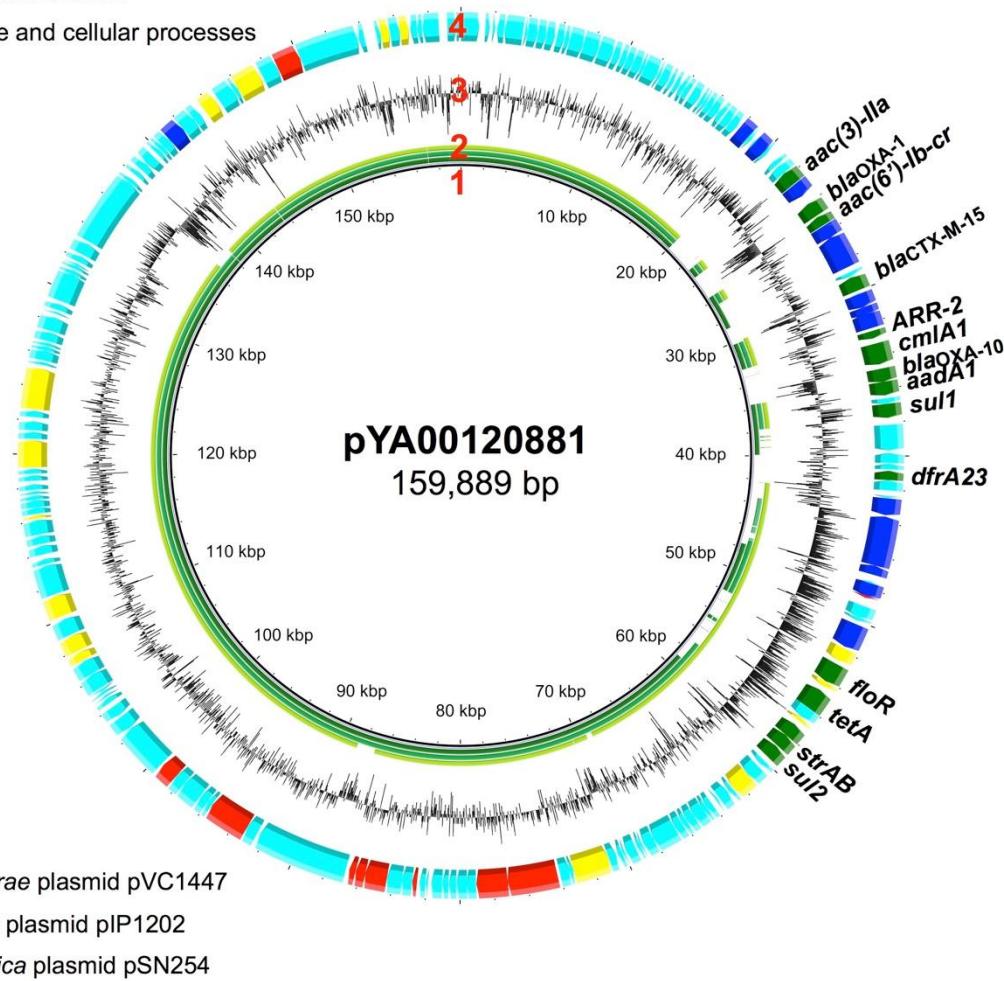
219

220 **Figure S2.** Circular map and comparative analysis of the multidrug-resistant
221 pYA00120881 IncA/C plasmid.

222

Circle 4

- [Green square] Antimicrobial drug resistance
- [Blue square] Transposase and integrase
- [Red square] Conjugation transfer
- [Yellow square] Structure and cellular processes
- [Cyan square] Other



Circle 2

- [Green square] V. cholerae plasmid pVC1447
- [Dark green square] Y. pestis plasmid pIP102
- [Yellow square] S. enterica plasmid pSN254

223

224 Circles from inside to outside indicate (1) the nucleotide position of pYA00120881, (2)
225 regions of pYA00120881 that share high homology with plasmids pVC1447 (*Vibrio cholerae*
226 O139, GenBank accession no. KM083064.1), pIP102 (*Yersinia pestis*, GenBank accession
227 no. CP000603.1), and pSN254 (*Salmonella enterica* serotype Newport, GenBank accession
228 no. NC_009140.1), (3) a G+C content map of pYA00120881, and (4) coding sequence
229 (CDS) colored according to their functions. The antimicrobial resistance genes are indicated.

Table S1. Metadata and phenotypic data of the Zimbabwean *V. cholerae* O1 isolates under study.

Isolate name	Isolation date (dd/mm/yyyy)	Country	Locality/Province	Source	O	Serotype	Minimum Inhibitory Concentrations (mg/L) of*:													
							AMP	AMC	CRO	SXT	TMP	SSS	CHL	NAL	CIP	TET	KAN	STR	MEM	AZM
891315	02/03/2015	Zimbabwe	Beit Bridge, Matebeleland South	Human	O1	Ogawa	>256	8	>256	>32	>32	>1024	16	>256	0.5	16	8	128	0.125	1
891316	02/03/2015	Zimbabwe	Beit Bridge, Matebeleland South	Human	O1	Ogawa	>256	8	>256	>32	>32	>1024	16	>256	0.5	16	8	128	0.125	1
YA00122530	07/09/2018	Zimbabwe	Glenview, Harare	Human	O1	Ogawa	256	16	128	>32	>32	1024	32	256	1	16	128	128	0,25	0,25
YA00122531	07/09/2018	Zimbabwe	Glenview, Harare	Human	O1	Ogawa	256	16	256	>32	>32	1024	16	256	1	8	128	128	0,25	0,25
YA00122532	06/09/2018	Zimbabwe	Glenview, Harare	Human	O1	Ogawa	256	16	256	>32	>32	1024	8	256	1	8	128	64	0,125	0,25
YA00122533	06/09/2018	Zimbabwe	Budiriro, Harare	Human	O1	Ogawa	256	32	256	>32	>32	1024	16	256	1	16	128	128	0,25	0,25
YA00122534	14/09/2018	Zimbabwe	Glenview, Harare	Human	O1	Ogawa	256	16	64	>32	>32	1024	16	256	1	8	128	128	0,25	0,25
YA00122536	27/09/2018	Zimbabwe	Muranbinda, Manicaland	Human	O1	Ogawa	256	16	256	>32	>32	1024	16	256	0.5	8	128	128	0,25	0,25
YA00122538	12/09/2018	Zimbabwe	Muranbinda, Manicaland	Human	O1	Ogawa	256	32	256	>32	>32	1024	16	256	1	8	128	128	0,25	0,25
YA00122539	06/09/2018	Zimbabwe	Glenview, Harare	Human	O1	Ogawa	256	16	256	>32	>32	1024	16	256	0.5	8	128	128	0,25	0,25
YA00122540	07/09/2018	Zimbabwe	Glenview, Harare	Human	O1	Ogawa	256	16	256	>32	>32	1024	16	256	1	8	128	128	0,25	0,25
YA00122542	27/09/2018	Zimbabwe	Sadza, Mashonaland East	Human	O1	Ogawa	256	32	256	>32	>32	1024	16	256	0.5	8	128	128	0,25	0,25
YA00120881	01/10/2018	Zimbabwe	Isolated from a traveler in South Africa	Human	O1	Ogawa	256	16	256	>32	>32	1024	16	256	2	16	64	64	0,25	0,5

*Abbreviations according to the American Society of Microbiology (<https://aac.asm.org/content/abbreviations-and-conventions>), except for SSS (sulfamethoxazole)

Table S2. Genomic characteristics of the Zimbabwean *V. cholerae* O1 isolates under study.

Isolate name	Genomic wave	7PET sublineage	rfb_01	VSP-II	ctxB	wbeT	tcpA
891315	3	T11	positive	VSP-II (Del VC_0495-VC_0512::ISVch4)	ctxB1	wild type	A266G
891316	3	T11	positive	VSP-II (Del VC_0495-VC_0512::ISVch4)	ctxB1	wild type	A266G
YA00122530	3	T13	positive	VSP-II (Del VC_0495-VC_0512::ISVch4)	ctxB7	wild type	A266G
YA00122531	3	T13	positive	VSP-II (Del VC_0495-VC_0512::ISVch4)	ctxB7	wild type	A266G
YA00122532	3	T13	positive	VSP-II (Del VC_0495-VC_0512::ISVch4)	ctxB7	wild type	A266G
YA00122533	3	T13	positive	VSP-II (Del VC_0495-VC_0512::ISVch4)	ctxB7	wild type	A266G
YA00122534	3	T13	positive	VSP-II (Del VC_0495-VC_0512::ISVch4)	ctxB7	wild type	A266G
YA00122536	3	T13	positive	VSP-II (Del VC_0495-VC_0512::ISVch4)	ctxB7	wild type	A266G
YA00122538	3	T13	positive	VSP-II (Del VC_0495-VC_0512::ISVch4)	ctxB7	wild type	A266G
YA00122539	3	T13	positive	VSP-II (Del VC_0495-VC_0512::ISVch4)	ctxB7	incomplete	A266G
YA00122540	3	T13	positive	VSP-II (Del VC_0495-VC_0512::ISVch4)	ctxB7	wild type	A266G
YA00122542	3	T13	positive	VSP-II (Del VC_0495-VC_0512::ISVch4)	ctxB7	wild type	A266G
YA00120881	3	T13	positive	VSP-II (Del VC_0495-VC_0512::ISVch4)	ctxB7	wild type	A266G

Table S3. Characteristics of the 2018-2019 Zimbabwean cholera epidemic strain according to data from the 11 sequenced isolates.

Species	<i>Vibrio cholerae</i>
Serogroup, serotype and biotype	O1, Ogawa, El Tor
Genomic wave	3
Genetic markers	<i>ctxB7</i> , <i>tcpA</i> ^{CIRS101} , VSP-II ^{Δ*}
AMR profile	AMP ^R (256 mg/L), CRO ^{R‡} (64-256 mg/L), SXT ^R (>32 mg/L), CHL ^{S/I/R} (8-32 mg/L), TET ^{I/R} (8-16 mg/L), NAL ^R (256 mg/L), CIP ^{I/R} (0.5-1 mg/L)
Horizontally acquired AMR elements	ICE <i>VchInd5</i> ^{Δ**} , IncA/C2 plasmid
Horizontally acquired AMR genes [#]	<i>bla</i> _{CTX-M-15} , <i>bla</i> _{OXA-10} , <i>bla</i> _{OXA-1} , <i>strAB</i> , <i>aadA1</i> , <i>aac(3)-Ila</i> , <i>aac(6')-Ib-cr</i> , <i>floR</i> , <i>cmlA1</i> , <i>sul1</i> , <i>sul2</i> , <i>dfrA1</i> , <i>dfrA23</i> , <i>tet(A)</i> , <i>ARR-2</i>
Mutated chromosomal genes (AMR phenotype)	<i>gyrA_S83I</i> and <i>parC_S85L</i> (NAL ^R , CIP ^{I/R}) <i>nfsA_R169C</i> and <i>nfsB_Q5Stop</i> (FT ^R) <i>vprA_D89N</i> (POL ^S)

AMR, antimicrobial resistance; AMP, ampicillin, CRO, ceftriaxone; STR, streptomycin; KAN, kanamycin; SXT, trimethoprim/sulfamethoxazole; CHL, chloramphenicol; TET, tetracycline; NAL, nalidixic acid; CIP, ciprofloxacin; MIC range values are indicated in parentheses; R, S, I, in uppercase indicate resistant, susceptible, and intermediate, according to CLSI, respectively; ^{Δ*} Deletion encompassing VC_0495 - VC_0512 according to GenBank accession no. AE003852; ^{Δ**}Deletion encompassing ICEVCHIND5_0011 - ICEVCHIND5_0021 according to GenBank accession no. GQ463142; [‡]production of an ESBL; [#] All genes are carried on the IncA/C plasmid, with the exception of *dfrA1* which is carried on the ICE *VchInd5* genomic element.

Table S4. Detected antimicrobial resistance elements and genes from the Zimbabwean *V. cholerae* O1 isolates under study.

Isolate name	IncA/C	SXT/R391	blaCTX-M-15	blaOXA-10	blaOXA-1	strA/strB	aadA1	aac(3)-Ila	aac(6')-lb-cr	catB3	floR	cmlA1	sul1	sul2	dfrA1	dfrA14	dfrA23	tet(A)	mph(A)	ARR-2	gyrA	parC	VC_0715	VC_A0637	vprA (VC_1320)
891315	IncA/C2	ICEVchInd5	blaCTX-M-15	/	/	strA/strB	/	aac(3)-Ila	/	/	floR	/	/	sul2	dfrA1	dfrA14	/	tet(A)	mph(A)	/	S83I	S85L	C505T (R169-to-C)	C13T (Q5-to-Stop)	wild type
891316	IncA/C2	ICEVchInd5	blaCTX-M-15	/	/	strA/strB	/	aac(3)-Ila	/	/	floR	/	/	sul2	dfrA1	dfrA14	/	tet(A)	mph(A)	/	S83I	S85L	C505T (R169-to-C)	C13T (Q5-to-Stop)	wild type
YA00122530	IncA/C2	ICEVchInd5_0 (strAB_sul2_floR)	blaCTX-M-15	blaOXA-10	blaOXA-1	strA/strB	aadA1	aac(3)-Ila	aac(6')-lb-cr	catB3	floR	cmlA1	sul1	sul2	dfrA1	/	dfrA23	tet(A)	/	ARR-2	S83I	S85L	C505T (R169-to-C)	C13T (Q5-to-Stop)	G265A (D89N)
YA00122531	IncA/C2	ICEVchInd5_0 (strAB_sul2_floR)	blaCTX-M-15	blaOXA-10	blaOXA-1	strA/strB	aadA1	aac(3)-Ila	aac(6')-lb-cr	catB3	floR	cmlA1	sul1	sul2	dfrA1	/	dfrA23	tet(A)	/	ARR-2	S83I	S85L	C505T (R169-to-C)	C13T (Q5-to-Stop)	G265A (D89N)
YA00122532	IncA/C2	ICEVchInd5_0 (strAB_sul2_floR)	blaCTX-M-15	blaOXA-10	blaOXA-1	strA/strB	aadA1	aac(3)-Ila	aac(6')-lb-cr	catB3	floR	cmlA1	sul1	sul2	dfrA1	/	dfrA23	tet(A)	/	ARR-2	S83I	S85L	C505T (R169-to-C)	C13T (Q5-to-Stop)	G265A (D89N)
YA00122533	IncA/C2	ICEVchInd5_0 (strAB_sul2_floR)	blaCTX-M-15	blaOXA-10	blaOXA-1	strA/strB	aadA1	aac(3)-Ila	aac(6')-lb-cr	catB3	floR	cmlA1	sul1	sul2	dfrA1	/	dfrA23	tet(A)	/	ARR-2	S83I	S85L	C505T (R169-to-C)	C13T (Q5-to-Stop)	G265A (D89N)
YA00122534	IncA/C2	ICEVchInd5_0 (strAB_sul2_floR)	blaCTX-M-15	blaOXA-10	blaOXA-1	strA/strB	aadA1	aac(3)-Ila	aac(6')-lb-cr	catB3	floR	cmlA1	sul1	sul2	dfrA1	/	dfrA23	tet(A)	/	ARR-2	S83I	S85L	C505T (R169-to-C)	C13T (Q5-to-Stop)	G265A (D89N)
YA00122536	IncA/C2	ICEVchInd5_0 (strAB_sul2_floR)	blaCTX-M-15	blaOXA-10	blaOXA-1	strA/strB	aadA1	aac(3)-Ila	aac(6')-lb-cr	catB3	floR	cmlA1	sul1	sul2	dfrA1	/	dfrA23	tet(A)	/	ARR-2	S83I	S85L	C505T (R169-to-C)	C13T (Q5-to-Stop)	G265A (D89N)
YA00122538	IncA/C2	ICEVchInd5_0 (strAB_sul2_floR)	blaCTX-M-15	blaOXA-10	blaOXA-1	strA/strB	aadA1	aac(3)-Ila	aac(6')-lb-cr	catB3	floR	cmlA1	sul1	sul2	dfrA1	/	dfrA23	tet(A)	/	ARR-2	S83I	S85L	C505T (R169-to-C)	C13T (Q5-to-Stop)	G265A (D89N)
YA00122539	IncA/C2	ICEVchInd5_0 (strAB_sul2_floR)	blaCTX-M-15	blaOXA-10	blaOXA-1	strA/strB	aadA1	aac(3)-Ila	aac(6')-lb-cr	catB3	floR	cmlA1	sul1	sul2	dfrA1	/	dfrA23	tet(A)	/	ARR-2	S83I	S85L	C505T (R169-to-C)	C13T (Q5-to-Stop)	G265A (D89N)
YA00122540	IncA/C2	ICEVchInd5_0 (strAB_sul2_floR)	blaCTX-M-15	blaOXA-10	blaOXA-1	strA/strB	aadA1	aac(3)-Ila	aac(6')-lb-cr	catB3	floR	cmlA1	sul1	sul2	dfrA1	/	dfrA23	tet(A)	/	ARR-2	S83I	S85L	C505T (R169-to-C)	C13T (Q5-to-Stop)	G265A (D89N)
YA00122542	IncA/C2	ICEVchInd5_0 (strAB_sul2_floR)	blaCTX-M-15	blaOXA-10	blaOXA-1	strA/strB	aadA1	aac(3)-Ila	aac(6')-lb-cr	catB3	floR	cmlA1	sul1	sul2	dfrA1	/	dfrA23	tet(A)	/	ARR-2	S83I	S85L	C505T (R169-to-C)	C13T (Q5-to-Stop)	G265A (D89N)
YA00120881	IncA/C2	ICEVchInd5_0 (strAB_sul2_floR)	blaCTX-M-15	blaOXA-10	blaOXA-1	strA/strB	aadA1	aac(3)-Ila	aac(6')-lb-cr	catB3	floR	cmlA1	sul1	sul2	dfrA1	/	dfrA23	tet(A)	/	ARR-2	S83I	S85L	C505T (R169-to-C)	C13T (Q5-to-Stop)	G265A (D89N)

/,

absence; Δ,

deletion

Table S5. Accession codes of the 1213 7PET genomes studied.

Isolate name	Year	Country	EBI-ENA accession no.	GenBank accession no.	Source
891315	2015	Zimbabwe	ERR3342504		This study
891316	2015	Zimbabwe	ERR3342505		This study
YA00122530	2018	Zimbabwe	ERR3342507		This study
YA00122531	2018	Zimbabwe	ERR3342508		This study
YA00122532	2018	Zimbabwe	ERR3342509		This study
YA00122533	2018	Zimbabwe	ERR3342510		This study
YA00122534	2018	Zimbabwe	ERR3342511		This study
YA00122536	2018	Zimbabwe	ERR3342512		This study
YA00122538	2018	Zimbabwe	ERR3342513		This study
YA00122539	2018	Zimbabwe	ERR3342514		This study
YA00122540	2018	Zimbabwe	ERR3342515		This study
YA00122542	2018	Zimbabwe	ERR3342516		This study
YA00120881	2018	Zimbabwe	ERR3342506		This study
31_1	2015	Kenya	ERR2265589		Weill et al. Nature 2019
4621STDY6714748	2015	Kenya	ERS1572783		Weill et al. Nature 2019
4621STDY6714749	2015	Kenya	ERS1572784		Weill et al. Nature 2019
4621STDY6714750	2015	Kenya	ERS1572785		Weill et al. Nature 2019
4621STDY6714758	2015	Kenya	ERS1572793		Weill et al. Nature 2019
4621STDY6714763	2012	Kenya	ERS1572798		Weill et al. Nature 2019
4621STDY6714768	2012	Kenya	ERS1572803		Weill et al. Nature 2019
4621STDY6714774	2012	Kenya	ERS1572809		Weill et al. Nature 2019
4621STDY6714778	2010	Kenya	ERS1572813		Weill et al. Nature 2019
4621STDY6714780	2016	Kenya	ERS1572815		Weill et al. Nature 2019
CNRVC110078	2011	Bangladesh	ERR2265590		Weill et al. Nature 2019
CNRVC140054	2014	South Sudan	ERR2265591		Weill et al. Nature 2019
CNRVC140069	2014	South Sudan	ERR2265645		Weill et al. Nature 2019
CNRVC140072	2014	South Sudan	ERR2265646		Weill et al. Nature 2019
CNRVC140077	2014	South Sudan	ERR2265647		Weill et al. Nature 2019
CNRVC140079	2014	South Sudan	ERR2265648		Weill et al. Nature 2019
CNRVC140176	2014	India	ERR2265649		Weill et al. Nature 2019
CNRVC150056	2015	Democratic Republic of the Congo	ERR2265650		Weill et al. Nature 2019

CNRVC150071	2015	Democratic Republic of the Congo	ERR2265651	Weill et al. Nature 2019
CNRVC150140	2015	India	ERR2265652	Weill et al. Nature 2019
CNRVC150141	2015	South Sudan	ERR2265653	Weill et al. Nature 2019
CNRVC150165	2015	South Sudan	ERR2265654	Weill et al. Nature 2019
CNRVC150168	2015	Iraq	ERR2265655	Weill et al. Nature 2019
CNRVC150169	2015	Iraq	ERR2265656	Weill et al. Nature 2019
CNRVC150170	2015	Iraq	ERR2265657	Weill et al. Nature 2019
CNRVC150171	2015	Iraq	ERR2265658	Weill et al. Nature 2019
CNRVC150177	2015	Iraq	ERR2265659	Weill et al. Nature 2019
CNRVC150181	2015	Iraq	ERR2265660	Weill et al. Nature 2019
CNRVC150256	2015	Democratic Republic of the Congo	ERR2265661	Weill et al. Nature 2019
CNRVC160013	2007	Iraq	ERR2265662	Weill et al. Nature 2019
CNRVC160014	2007	Iraq	ERR2265663	Weill et al. Nature 2019
CNRVC160016	2007	Iraq	ERR2265664	Weill et al. Nature 2019
CNRVC160017	2007	Iraq	ERR2265665	Weill et al. Nature 2019
CNRVC160018	2007	Iraq	ERR2265666	Weill et al. Nature 2019
CNRVC160461	2016	South Sudan	ERR2265667	Weill et al. Nature 2019
CNRVC160462	2016	South Sudan	ERR2265668	Weill et al. Nature 2019
CNRVC170159	2017	South Sudan	ERR2265669	Weill et al. Nature 2019
CNRVC170160	2017	South Sudan	ERR2265670	Weill et al. Nature 2019
CNRVC170161	2017	South Sudan	ERR2265671	Weill et al. Nature 2019
CNRVC170164	2017	South Sudan	ERR2265672	Weill et al. Nature 2019
CNRVC170165	2017	South Sudan	ERR2265673	Weill et al. Nature 2019
CNRVC170168	2016	Yemen	ERR2265674	Weill et al. Nature 2019
CNRVC170169	2016	Yemen	ERR2265675	Weill et al. Nature 2019
CNRVC170170	2016	Yemen	ERR2265676	Weill et al. Nature 2019
CNRVC170173	2016	Yemen	ERR2265677	Weill et al. Nature 2019
CNRVC170174	2016	Yemen	ERR2265678	Weill et al. Nature 2019
CNRVC170175	2016	Yemen	ERR2269613	Weill et al. Nature 2019
CNRVC170176	2016	Yemen	ERR2269614	Weill et al. Nature 2019
CNRVC170177	2016	Yemen	ERR2269615	Weill et al. Nature 2019
CNRVC170178	2017	Yemen	ERR2269616	Weill et al. Nature 2019
CNRVC170179	2017	Yemen	ERR2269617	Weill et al. Nature 2019
CNRVC170180	2017	Yemen	ERR2269618	Weill et al. Nature 2019
CNRVC170181	2017	Yemen	ERR2269619	Weill et al. Nature 2019
CNRVC170182	2017	Yemen	ERR2269620	Weill et al. Nature 2019
CNRVC170183	2017	Yemen	ERR2269621	Weill et al. Nature 2019
CNRVC170184	2017	Yemen	ERR2269622	Weill et al. Nature 2019

CNRVC170185	2017	Yemen	ERR2269640	Weill et al. Nature 2019
CNRVC170186	2017	Yemen	ERR2269641	Weill et al. Nature 2019
CNRVC170187	2017	Yemen	ERR2269642	Weill et al. Nature 2019
CNRVC170188	2017	Yemen	ERR2269643	Weill et al. Nature 2019
CNRVC170189	2017	Yemen	ERR2269644	Weill et al. Nature 2019
CNRVC170190	2017	Yemen	ERR2269645	Weill et al. Nature 2019
CNRVC170191	2017	Yemen	ERR2269646	Weill et al. Nature 2019
CNRVC170192	2017	Yemen	ERR2269647	Weill et al. Nature 2019
CNRVC170193	2017	Yemen	ERR2269648	Weill et al. Nature 2019
CNRVC170194	2017	Yemen	ERR2269649	Weill et al. Nature 2019
CNRVC170195	2017	Yemen	ERR2269650	Weill et al. Nature 2019
CNRVC170196	2017	Yemen	ERR2269709	Weill et al. Nature 2019
CNRVC170197	2017	Yemen	ERR2269710	Weill et al. Nature 2019
CNRVC170198	2017	Yemen	ERR2269711	Weill et al. Nature 2019
CNRVC170199	2017	Yemen	ERR2269712	Weill et al. Nature 2019
CNRVC170200	2017	Yemen	ERR2269713	Weill et al. Nature 2019
CNRVC170201	2017	Yemen	ERR2269714	Weill et al. Nature 2019
CNRVC170202	2017	Yemen	ERR2269715	Weill et al. Nature 2019
CNRVC170203	2017	Yemen	ERR2269716	Weill et al. Nature 2019
CNRVC170204	2017	Yemen	ERR2269717	Weill et al. Nature 2019
CNRVC170205	2017	Yemen	ERR2269718	Weill et al. Nature 2019
CNRVC170206	2017	Yemen	ERR2269809	Weill et al. Nature 2019
CNRVC170207	2017	Yemen	ERR2269810	Weill et al. Nature 2019
CNRVC170208	2017	Yemen	ERR2269811	Weill et al. Nature 2019
CNRVC170240	2017	Yemen	ERR2269832	Weill et al. Nature 2019
CNRVC170241	2017	Yemen	ERR2269833	Weill et al. Nature 2019
CNRVC170242	2017	Yemen	ERR2269834	Weill et al. Nature 2019
CNRVC170248	2012	Iran	ERR2269835	Weill et al. Nature 2019
CNRVC170249	2013	Iran	ERR2269836	Weill et al. Nature 2019
CNRVC170250	2013	Iran	ERR2269837	Weill et al. Nature 2019
CNRVC170252	2015	Iran	ERR2269838	Weill et al. Nature 2019
THSTI_20370	2010	India	ERR2269808	Weill et al. Nature 2019
THSTI_23485	2010	India	ERR2269921	Weill et al. Nature 2019
THSTI_23835	2010	India	ERR2269922	Weill et al. Nature 2019
THSTI_26866	2011	India	ERR2269923	Weill et al. Nature 2019
THSTI_26871	2011	India	ERR2269924	Weill et al. Nature 2019
THSTI_26907	2011	India	ERR2269925	Weill et al. Nature 2019
THSTI_27071	2011	India	ERR2269926	Weill et al. Nature 2019

THSTI_31698	2012	India	ERR2269927	Weill et al. Nature 2019
THSTI_32676	2012	India	ERR2269928	Weill et al. Nature 2019
THSTI_33102	2012	India	ERR2269929	Weill et al. Nature 2019
THSTI_36124	2013	India	ERR2269930	Weill et al. Nature 2019
THSTI_36133	2013	India	ERR2269944	Weill et al. Nature 2019
THSTI_36136	2013	India	ERR2269945	Weill et al. Nature 2019
THSTI_36268	2013	India	ERR2269946	Weill et al. Nature 2019
THSTI_41049	2014	India	ERR2269947	Weill et al. Nature 2019
THSTI_41055	2014	India	ERR2269948	Weill et al. Nature 2019
THSTI_41081	2014	India	ERR2269949	Weill et al. Nature 2019
THSTI_45544	2015	India	ERR2269950	Weill et al. Nature 2019
THSTI_45869	2015	India	ERR2269951	Weill et al. Nature 2019
THSTI_45983	2015	India	ERR2269952	Weill et al. Nature 2019
THSTI_46073	2015	India	ERR2269953	Weill et al. Nature 2019
THSTI_52586	2016	India	ERR2270655	Weill et al. Nature 2019
THSTI_52588	2016	India	ERR2270656	Weill et al. Nature 2019
THSTI_52629	2016	India	ERR2270657	Weill et al. Nature 2019
THSTI_52665	2016	India	ERR2270658	Weill et al. Nature 2019
THSTI_55199	2017	India	ERR2270659	Weill et al. Nature 2019
THSTI_56650	2017	India	ERR2270660	Weill et al. Nature 2019
THSTI_56695	2017	India	ERR2270661	Weill et al. Nature 2019
THSTI_56712	2017	India	ERR2270662	Weill et al. Nature 2019
7772	2009	India	ERR351208	Abd El Ghany et al. PLoS Negl Trop Dis 2014
7994	2009	India	ERR351210	Abd El Ghany et al. PLoS Negl Trop Dis 2014
5286	2009	India	ERR351188	Abd El Ghany et al. PLoS Negl Trop Dis 2014
6734	2009	India	ERR351205	Abd El Ghany et al. PLoS Negl Trop Dis 2014
5417	2009	India	ERR351191	Abd El Ghany et al. PLoS Negl Trop Dis 2014
6801	2009	India	ERR351206	Abd El Ghany et al. PLoS Negl Trop Dis 2014
5185	2009	India	ERR351179	Abd El Ghany et al. PLoS Negl Trop Dis 2014
6557	2009	India	ERR351203	Abd El Ghany et al. PLoS Negl Trop Dis 2014
4966	2009	India	ERR351174	Abd El Ghany et al. PLoS Negl Trop Dis 2014
7683	2009	India	ERR351207	Abd El Ghany et al. PLoS Negl Trop Dis 2014
5663	2009	India	ERR351192	Abd El Ghany et al. PLoS Negl Trop Dis 2014
6259	2009	India	ERR351199	Abd El Ghany et al. PLoS Negl Trop Dis 2014
5046	2009	India	ERR351175	Abd El Ghany et al. PLoS Negl Trop Dis 2014
5202	2009	India	ERR351185	Abd El Ghany et al. PLoS Negl Trop Dis 2014
6016	2009	India	ERR351193	Abd El Ghany et al. PLoS Negl Trop Dis 2014
UG026	2015	Uganda	SAMN08744332	Bwire et al. PLoS Negl Trop Dis 2018

UG010	2016	Uganda	SAMN08744330	Bwire et al. PLoS Negl Trop Dis 2018
UG020	2016	Uganda	SAMN08744331	Bwire et al. PLoS Negl Trop Dis 2018
RC9	1985	Kenya	ACHX00000000	Chun et al. Proc Natl Acad Sci USA 2009
MO10	1992	India	AAKF03000000	Chun et al. Proc Natl Acad Sci USA 2009
MJ1236	1994	Bangladesh	CP001485/CP001486	Chun et al. Proc Natl Acad Sci USA 2009
B33	2004	Mozambique	ACHZ00000000	Chun et al. Proc Natl Acad Sci USA 2009
CIRS101	2002	Bangladesh	ACVW00000000	Chun et al. Proc Natl Acad Sci USA 2009
6311-CDC	1961	Indonesia	ERR576982	Didelot et al. PLoS Genet 2015
6312-CDC	1961	Indonesia	ERR576981	Didelot et al. PLoS Genet 2015
D118-CDC	1961	China	ERR576972	Didelot et al. PLoS Genet 2015
2921-CDC	1962	China	ERR579055	Didelot et al. PLoS Genet 2015
2894-CDC	1961	China	ERR579057	Didelot et al. PLoS Genet 2015
2865-CDC	1961	China	ERR579060	Didelot et al. PLoS Genet 2015
63244-CDC	1963	China	ERR576980	Didelot et al. PLoS Genet 2015
2881-CDC	1961	China	ERR579058	Didelot et al. PLoS Genet 2015
2744-CDC	1962	China	ERR579066	Didelot et al. PLoS Genet 2015
2981-CDC	1965	China	ERR579053	Didelot et al. PLoS Genet 2015
2873-CDC	1961	China	ERR579059	Didelot et al. PLoS Genet 2015
GD196110-CDC	1961	China	ERR576971	Didelot et al. PLoS Genet 2015
2914-CDC	1966	China	ERR579056	Didelot et al. PLoS Genet 2015
3289-CDC	1978	China	ERR577143	Didelot et al. PLoS Genet 2015
2308-CDC	1978	China	ERR579074	Didelot et al. PLoS Genet 2015
3075-CDC	1974	China	ERR579050	Didelot et al. PLoS Genet 2015
2783-CDC	1964	China	ERR579063	Didelot et al. PLoS Genet 2015
2957-CDC	1964	China	ERR579054	Didelot et al. PLoS Genet 2015
3014-CDC	1969	China	ERR579052	Didelot et al. PLoS Genet 2015
6310-CDC	1961	Indonesia	ERR576983	Didelot et al. PLoS Genet 2015
642345-CDC	1964	China	ERR576979	Didelot et al. PLoS Genet 2015
3024-CDC	1973	China	ERR579051	Didelot et al. PLoS Genet 2015
3304-CDC	1979	China	ERR577142	Didelot et al. PLoS Genet 2015
3538-CDC	1981	China	ERR577140	Didelot et al. PLoS Genet 2015
863-CDC	1986	Mauritania	ERR576978	Didelot et al. PLoS Genet 2015
V01-CDC	1991	Chile	ERR576950	Didelot et al. PLoS Genet 2015
C6706-CDC	1991	Peru	ERR576973	Didelot et al. PLoS Genet 2015
X190-CDC	1991	Peru	ERR580006	Didelot et al. PLoS Genet 2015
1551-CDC	1979	China	ERR579083	Didelot et al. PLoS Genet 2015
132-CDC	1978	China	ERR579087	Didelot et al. PLoS Genet 2015
2578-CDC	1985	China	ERR579919	Didelot et al. PLoS Genet 2015

3626-CDC	1983	China	ERR576995	Didelot et al. PLoS Genet 2015
2580-CDC	1989	China	ERR579070	Didelot et al. PLoS Genet 2015
3735-CDC	1988	China	ERR576987	Didelot et al. PLoS Genet 2015
3595-CDC	1983	China	ERR576996	Didelot et al. PLoS Genet 2015
2574-CDC	1980	China	ERR579072	Didelot et al. PLoS Genet 2015
3564-CDC	1982	China	ERR577139	Didelot et al. PLoS Genet 2015
3497-CDC	1980	China	ERR577141	Didelot et al. PLoS Genet 2015
2833-CDC	1979	China	ERR579062	Didelot et al. PLoS Genet 2015
2752-CDC	1981	China	ERR579065	Didelot et al. PLoS Genet 2015
3633-CDC	1984	China	ERR576988	Didelot et al. PLoS Genet 2015
1283-CDC	1984	China	ERR579088	Didelot et al. PLoS Genet 2015
3270-CDC	1977	China	ERR579049	Didelot et al. PLoS Genet 2015
2710-CDC	1986	China	ERR579067	Didelot et al. PLoS Genet 2015
T21-CDC	1990	Thailand	ERR576970	Didelot et al. PLoS Genet 2015
2757-CDC	1987	China	ERR579064	Didelot et al. PLoS Genet 2015
2848-CDC	1988	China	ERR579061	Didelot et al. PLoS Genet 2015
1575-CDC	1990	China	ERR579082	Didelot et al. PLoS Genet 2015
1593-CDC	1992	China	ERR579080	Didelot et al. PLoS Genet 2015
1583-CDC	1991	China	ERR579081	Didelot et al. PLoS Genet 2015
200106-CDC	2001	China	ERR579313	Didelot et al. PLoS Genet 2015
4039-CDC	1993	China	ERR576986	Didelot et al. PLoS Genet 2015
93284-CDC	1993	China	ERR576977	Didelot et al. PLoS Genet 2015
129-CDC	1994	China	ERR579311	Didelot et al. PLoS Genet 2015
1525-CDC	1994	China	ERR579986	Didelot et al. PLoS Genet 2015
2530-CDC	1996	China	ERR579073	Didelot et al. PLoS Genet 2015
V011506-CDC	2001	China	ERR576951	Didelot et al. PLoS Genet 2015
9-CDC	2001	China	ERR579309	Didelot et al. PLoS Genet 2015
147-CDC	2002	China	ERR579085	Didelot et al. PLoS Genet 2015
4070-CDC	1994	China	ERR576985	Didelot et al. PLoS Genet 2015
2657-CDC	1995	China	ERR579068	Didelot et al. PLoS Genet 2015
956-CDC	2001	China	ERR576975	Didelot et al. PLoS Genet 2015
SC2000-CDC	2000	China	ERR579091	Didelot et al. PLoS Genet 2015
SC1998_242-1-CDC	1998	China	ERR579092	Didelot et al. PLoS Genet 2015
143-CDC	2001	China	ERR579086	Didelot et al. PLoS Genet 2015
1627-CDC	1997	China	ERR579078	Didelot et al. PLoS Genet 2015
SC1998_098-1-CDC	1998	China	ERR579114	Didelot et al. PLoS Genet 2015
1909-CDC	1998	China	ERR579077	Didelot et al. PLoS Genet 2015
936-CDC	1998	China	ERR576976	Didelot et al. PLoS Genet 2015

JX1998-1306-1-CDC	1998	China	ERR579093	Didelot et al. PLoS Genet 2015
1605-CDC	1993	China	ERR579079	Didelot et al. PLoS Genet 2015
2605-CDC	1998	China	ERR579069	Didelot et al. PLoS Genet 2015
1944-CDC	2000	China	ERR579076	Didelot et al. PLoS Genet 2015
4210-CDC	1999	China	ERR576984	Didelot et al. PLoS Genet 2015
AHV1003-CDC	2010	China	ERR576974	Didelot et al. PLoS Genet 2015
2255-CDC	2008	China	ERR579075	Didelot et al. PLoS Genet 2015
VC2248-1-CDC	2008	China	ERR579090	Didelot et al. PLoS Genet 2015
VC2454-CDC	2005	China	ERR579089	Didelot et al. PLoS Genet 2015
CNRVC140118	1991	Brazil	ERR976489	Domman et al. Science 2017
CNRVC950014	1995	Ecuador	ERR1879579	Domman et al. Science 2017
CNRVC140121	1991	Brazil	ERR976492	Domman et al. Science 2017
688	2006	Mexico	ERR108537	Domman et al. Science 2017
CNRVC140125	1992	Bolivia	ERR976496	Domman et al. Science 2017
CNRVC140117	1991	Bolivia	ERR976488	Domman et al. Science 2017
CNRVC140126	1991	Bolivia	ERR976497	Domman et al. Science 2017
CNRVC140123	1992	Bolivia	ERR976494	Domman et al. Science 2017
CNRVC140124	1992	Bolivia	ERR976495	Domman et al. Science 2017
CNRVC140122	1992	Brazil	ERR976493	Domman et al. Science 2017
CNRVC930025	1993	French Guiana	ERR1879554	Domman et al. Science 2017
CNRVC940183	1994	French Guiana	ERR1879578	Domman et al. Science 2017
116072	1991	Mexico	ERR044779	Domman et al. Science 2017
87662	1993	Mexico	ERR044786	Domman et al. Science 2017
87667	1993	Mexico	ERR044785	Domman et al. Science 2017
82	1998	Mexico	ERR108516	Domman et al. Science 2017
54267_1994	1994	Mexico	ERR163241	Domman et al. Science 2017
54328_1994	1994	Mexico	ERR163242	Domman et al. Science 2017
33297_1993	1993	Mexico	ERR163240	Domman et al. Science 2017
Mex6	1992	Mexico	ERR042754	Domman et al. Science 2017
116075	1992	Mexico	ERR044783	Domman et al. Science 2017
54	1999	Mexico	ERR108518	Domman et al. Science 2017
85	2000	Mexico	ERR108522	Domman et al. Science 2017
60483_1995	1995	Mexico	ERR163244	Domman et al. Science 2017
60452_1995	1995	Mexico	ERR163243	Domman et al. Science 2017
116073	1991	Mexico	ERR044781	Domman et al. Science 2017
838	1999	Mexico	ERR108517	Domman et al. Science 2017
95430	1997	Mexico	ERR044791	Domman et al. Science 2017
S0074	2003	Mozambique	ERS1938060	Garrine et al. PLoS Neglect Trop Dis 2017

S0034	2002	Mozambique	ERS1938058	Garrine et al. PLoS Neglect Trop Dis 2017
S0035	2002	Mozambique	ERS1938059	Garrine et al. PLoS Neglect Trop Dis 2017
S121	2003	Mozambique	ERS1938079	Garrine et al. PLoS Neglect Trop Dis 2017
S1019828_5	2010	Mozambique	ERS1938068	Garrine et al. PLoS Neglect Trop Dis 2017
S1020229_6	2010	Mozambique	ERS1938072	Garrine et al. PLoS Neglect Trop Dis 2017
S152	2003	Mozambique	ERS1938085	Garrine et al. PLoS Neglect Trop Dis 2017
S0014	2002	Mozambique	ERS1938051	Garrine et al. PLoS Neglect Trop Dis 2017
N16961	1975	Bangladesh	LT907989/LT907990	Heidelberg et al. Nature 2000
VC-22	2010	Nepal	SRR308725	Hendriksen et al. Mbio 2011
VC-21	2010	Nepal	SRR308724	Hendriksen et al. Mbio 2011
VC-20	2010	Nepal	SRR308723	Hendriksen et al. Mbio 2011
VC-9	2010	Nepal	SRR308706	Hendriksen et al. Mbio 2011
VC-11	2010	Nepal	SRR308708	Hendriksen et al. Mbio 2011
VC-13	2010	Nepal	SRR308713	Hendriksen et al. Mbio 2011
VC-17	2010	Nepal	SRR308720	Hendriksen et al. Mbio 2011
VC-4	2010	Nepal	SRR308692	Hendriksen et al. Mbio 2011
VC-3	2010	Nepal	SRR308691	Hendriksen et al. Mbio 2011
VC-12	2010	Nepal	SRR308709	Hendriksen et al. Mbio 2011
VC-10	2010	Nepal	SRR308707	Hendriksen et al. Mbio 2011
VC-5	2010	Nepal	SRR308693	Hendriksen et al. Mbio 2011
VC-16	2010	Nepal	SRR308717	Hendriksen et al. Mbio 2011
VC-2	2010	Nepal	SRR308690	Hendriksen et al. Mbio 2011
VC-7	2010	Nepal	SRR308704	Hendriksen et al. Mbio 2011
VC-1	2010	Nepal	SRR308665	Hendriksen et al. Mbio 2011
VC-8	2010	Nepal	SRR308705	Hendriksen et al. Mbio 2011
VC-19	2010	Nepal	SRR308722	Hendriksen et al. Mbio 2011
VC-6	2010	Nepal	SRR308703	Hendriksen et al. Mbio 2011
VC-18	2010	Nepal	SRR308721	Hendriksen et al. Mbio 2011
VC-15	2010	Nepal	SRR308716	Hendriksen et al. Mbio 2011
VC-26	2010	Nepal	SRR308727	Hendriksen et al. Mbio 2011
VC-14	2010	Nepal	SRR308715	Hendriksen et al. Mbio 2011
VC-25	2010	Nepal	SRR308726	Hendriksen et al. Mbio 2011
Tanz_2	2015	Tanzania	ERS2318680	Kachwamba et al. BMC Infect Dis 2017
Tanz_3	2015	Tanzania	ERS2318681	Kachwamba et al. BMC Infect Dis 2017
Tanz_9	2015	Tanzania	ERS2318682	Kachwamba et al. BMC Infect Dis 2017
Tanz_14	2015	Tanzania	ERS2318685	Kachwamba et al. BMC Infect Dis 2017
Tanz_20	2015	Tanzania	ERS2318689	Kachwamba et al. BMC Infect Dis 2017
Tanz_33	2015	Tanzania	ERS2318693	Kachwamba et al. BMC Infect Dis 2017

Tanz_42	2015	Tanzania	ERS2318697	Kachwamba et al. BMC Infect Dis 2017
Tanz_48	2015	Tanzania	ERS2318700	Kachwamba et al. BMC Infect Dis 2017
Tanz_56	2012	Tanzania	ERS2318703	Kachwamba et al. BMC Infect Dis 2017
Tanz_58	2011	Tanzania	ERS2318704	Kachwamba et al. BMC Infect Dis 2017
Tanz_60	2012	Tanzania	ERS2318705	Kachwamba et al. BMC Infect Dis 2017
Tanz_65	2015	Tanzania	ERS2318708	Kachwamba et al. BMC Infect Dis 2017
Tanz_78	2015	Tanzania	ERS2318712	Kachwamba et al. BMC Infect Dis 2017
Tanz_100_1	2015	Tanzania	ERS2318718	Kachwamba et al. BMC Infect Dis 2017
CP1041	2004	Zambia	SRR227309	Katz et al. Mbio 2013
CP1042	2010	Thailand	SRR227324	Katz et al. Mbio 2013
2011EL_1137	2009	Republic of South Africa	SRR774784	Katz et al. Mbio 2013
CP1038	2009	Zimbabwe	SRR227311	Katz et al. Mbio 2013
CP1048	2010	Bangladesh	SRR227303	Katz et al. Mbio 2013
CP1050	2010	Bangladesh	SRR227335	Katz et al. Mbio 2013
HC-40A1	2010	Haiti	SRR135545	Katz et al. Mbio 2013
HCUF01	2010	Haiti	SRR135540	Katz et al. Mbio 2013
HC-68A1	2010	Haiti	SRR191363	Katz et al. Mbio 2013
HC-22A1	2010	Haiti	SRR191381	Katz et al. Mbio 2013
2010EL_1749	2010	Cameroon	SRR773655	Katz et al. Mbio 2013
VE3	2010	Kenya	ERR037741	Kiiru et al. Plos One 2013
KNC1888	2007	Kenya	ERR117593	Kiiru et al. Plos One 2013
KNC147	2010	Kenya	ERR117588	Kiiru et al. Plos One 2013
KNC151	2010	Kenya	ERR117573	Kiiru et al. Plos One 2013
KNC145	2010	Kenya	ERR117571	Kiiru et al. Plos One 2013
KNC158	2010	Kenya	ERR117583	Kiiru et al. Plos One 2013
KNC157	2009	Kenya	ERR117592	Kiiru et al. Plos One 2013
KNC8885	2010	Kenya	ERR117595	Kiiru et al. Plos One 2013
KNC155	2010	Kenya	ERR117597	Kiiru et al. Plos One 2013
KNC156	2009	Kenya	ERR117594	Kiiru et al. Plos One 2013
VE1	2010	Kenya	ERR037738	Kiiru et al. Plos One 2013
KNC8880	2010	Kenya	ERR117578	Kiiru et al. Plos One 2013
KNC8889	2010	Kenya	ERR117581	Kiiru et al. Plos One 2013
VE2	2010	Kenya	ERR037739	Kiiru et al. Plos One 2013
KNEXXH	2009	Kenya	ERR117556	Kiiru et al. Plos One 2013
KNEXC	2009	Kenya	ERR117555	Kiiru et al. Plos One 2013
KNC8669	2010	Kenya	ERR117599	Kiiru et al. Plos One 2013
KNC1420	2009	Kenya	ERR117607	Kiiru et al. Plos One 2013
KNE170	2010	Kenya	ERR117485	Kiiru et al. Plos One 2013

KNE168	2010	Kenya	ERR117569	Kiiru et al. Plos One 2013
KNC161	2010	Kenya	ERR117590	Kiiru et al. Plos One 2013
KNC133	2007	Kenya	ERR117579	Kiiru et al. Plos One 2013
KNC233	2009	Kenya	ERR117605	Kiiru et al. Plos One 2013
KNC207	2009	Kenya	ERR117609	Kiiru et al. Plos One 2013
KNC135	2009	Kenya	ERR117572	Kiiru et al. Plos One 2013
KNE134B	2009	Kenya	ERR117482	Kiiru et al. Plos One 2013
KNE134	2009	Kenya	ERR117480	Kiiru et al. Plos One 2013
KNC8678	2009	Kenya	ERR114416	Kiiru et al. Plos One 2013
KNE3C	2010	Kenya	ERR117473	Kiiru et al. Plos One 2013
KNE3G	2010	Kenya	ERR117490	Kiiru et al. Plos One 2013
KNC11	2010	Kenya	ERR117586	Kiiru et al. Plos One 2013
KNE11B	2010	Kenya	ERR117484	Kiiru et al. Plos One 2013
KNC1509	2009	Kenya	ERR117613	Kiiru et al. Plos One 2013
KNC56	2010	Kenya	ERR117577	Kiiru et al. Plos One 2013
KNC8673	2009	Kenya	ERR114415	Kiiru et al. Plos One 2013
KNC8675	2009	Kenya	ERR117610	Kiiru et al. Plos One 2013
KNC8572	2009	Kenya	ERR117612	Kiiru et al. Plos One 2013
KNC8679	2008	Kenya	ERR117606	Kiiru et al. Plos One 2013
KNC206	2009	Kenya	ERR117604	Kiiru et al. Plos One 2013
KNC1709	2009	Kenya	ERR114418	Kiiru et al. Plos One 2013
KNC231	2009	Kenya	ERR117600	Kiiru et al. Plos One 2013
A6	1957	Indonesia	ERR025382	Mutreja et al. Nature 2011
A18	1977	India	ERR025384	Mutreja et al. Nature 2011
A4	1973	Unknown	ERR025380	Mutreja et al. Nature 2011
A152	1991	Mozambique	ERR018152	Mutreja et al. Nature 2011
A155	1991	Mozambique	ERR018150	Mutreja et al. Nature 2011
A154	1991	Mozambique	ERR018151	Mutreja et al. Nature 2011
A5	1989	Angola	ERR025381	Mutreja et al. Nature 2011
A177	1992	Colombia	ERR018149	Mutreja et al. Nature 2011
A180	1992	Colombia	ERR018148	Mutreja et al. Nature 2011
A184	1992	Colombia	ERR018146	Mutreja et al. Nature 2011
A185	1992	Colombia	ERR018156	Mutreja et al. Nature 2011
A27	1991	Peru	ERR025378	Mutreja et al. Nature 2011
A29	1991	Peru	ERR025388	Mutreja et al. Nature 2011
A31	1991	Peru	ERR025389	Mutreja et al. Nature 2011
A32	1991	Peru	ERR025390	Mutreja et al. Nature 2011
A316	1993	Argentina	ERR018181	Mutreja et al. Nature 2011

A200	1992	Argentina	ERR018168	Mutreja et al. Nature 2011
A193	1992	Bolivia	ERR018160	Mutreja et al. Nature 2011
A186	1992	Argentina	ERR018158	Mutreja et al. Nature 2011
A201	1992	Argentina	ERR018167	Mutreja et al. Nature 2011
A232	1991	Mexico	ERR018159	Mutreja et al. Nature 2011
A231	1991	Mexico	ERR018161	Mutreja et al. Nature 2011
A19	1971	Bangladesh	ERR025385	Mutreja et al. Nature 2011
GP60	1973	India	ERR018186	Mutreja et al. Nature 2011
GP152	1979	India	ERR018188	Mutreja et al. Nature 2011
A22	1979	Bangladesh	ERR025386	Mutreja et al. Nature 2011
A397	1987	Bangladesh	ERR018176	Mutreja et al. Nature 2011
GP143	1978	Bahrein	ERR018192	Mutreja et al. Nature 2011
GP140	1978	Malaysia	ERR018193	Mutreja et al. Nature 2011
A245	1989	Viet Nam	ERR018171	Mutreja et al. Nature 2011
A241	1989	Viet Nam	ERR018169	Mutreja et al. Nature 2011
A10	1979	Bangladesh	ERR025383	Mutreja et al. Nature 2011
A390	1987	Bangladesh	ERR018177	Mutreja et al. Nature 2011
PRL5	1980	India	ERR018189	Mutreja et al. Nature 2011
A330	1993	India	ERR018119	Mutreja et al. Nature 2011
A383	2002	Bangladesh	ERR018121	Mutreja et al. Nature 2011
A109	1990	Unknown	ERR018147	Mutreja et al. Nature 2011
4113	2003	Viet Nam	ERR025364	Mutreja et al. Nature 2011
4111	2002	Viet Nam	ERR019880	Mutreja et al. Nature 2011
4121	2004	Viet Nam	ERR025362	Mutreja et al. Nature 2011
4110	1995	Viet Nam	ERR019879	Mutreja et al. Nature 2011
4672	2000	Bangladesh	ERR019884	Mutreja et al. Nature 2011
4670	1991	Bangladesh	ERR019883	Mutreja et al. Nature 2011
V212-1	1991	India	ERR018125	Mutreja et al. Nature 2011
VC51	1992	India	ERR018124	Mutreja et al. Nature 2011
MJ1485	1994	Bangladesh	ERR018120	Mutreja et al. Nature 2011
A346(2)	1994	Bangladesh	ERR018179	Mutreja et al. Nature 2011
1627	2005	Mozambique	ERR025377	Mutreja et al. Nature 2011
1346	2005	Mozambique	ERR025356	Mutreja et al. Nature 2011
1362	2005	Mozambique	ERR025367	Mutreja et al. Nature 2011
A130	1989	India	ERR018154	Mutreja et al. Nature 2011
A131	1989	India	ERR018153	Mutreja et al. Nature 2011
V5	1989	India	ERR018127	Mutreja et al. Nature 2011
MG116025	1991	Bangladesh	ERR018122	Mutreja et al. Nature 2011

MG116226	1991	Bangladesh	ERR025396	Mutreja et al. Nature 2011
V109	1990	India	ERR018126	Mutreja et al. Nature 2011
6197	2007	Kenya	ERR019292	Mutreja et al. Nature 2011
6193	2005	Kenya	ERR019296	Mutreja et al. Nature 2011
6201	2007	Kenya	ERR019291	Mutreja et al. Nature 2011
6191	2005	Kenya	ERR019288	Mutreja et al. Nature 2011
6194	2007	Kenya	ERR019295	Mutreja et al. Nature 2011
6212	2007	Kenya	ERR019289	Mutreja et al. Nature 2011
6210	2007	Kenya	ERR019290	Mutreja et al. Nature 2011
6214	2007	Kenya	ERR019287	Mutreja et al. Nature 2011
6215	2005	Kenya	ERR019297	Mutreja et al. Nature 2011
4784	2009	Tanzania	ERR025370	Mutreja et al. Nature 2011
A482	2007	Djibouti	ERR018174	Mutreja et al. Nature 2011
A483	2007	Djibouti	ERR018172	Mutreja et al. Nature 2011
A481	2007	Djibouti	ERR018175	Mutreja et al. Nature 2011
7682	2009	Kenya	ERR028066	Mutreja et al. Nature 2011
7687	2009	Kenya	ERR028074	Mutreja et al. Nature 2011
7685	2009	Kenya	ERR028076	Mutreja et al. Nature 2011
7684	2009	Kenya	ERR028068	Mutreja et al. Nature 2011
7686	2009	Kenya	ERR028075	Mutreja et al. Nature 2011
PRL64	1992	India	ERR018195	Mutreja et al. Nature 2011
4646	2007	India	ERR025372	Mutreja et al. Nature 2011
4656	2006	India	ERR018112	Mutreja et al. Nature 2011
4339	2004	India	ERR025361	Mutreja et al. Nature 2011
MBRN14	2004	India	ERR018130	Mutreja et al. Nature 2011
4322	2004	India	ERR019881	Mutreja et al. Nature 2011
4488	2006	India	ERR025369	Mutreja et al. Nature 2011
4551	2007	India	ERR025357	Mutreja et al. Nature 2011
4552	2007	India	ERR025368	Mutreja et al. Nature 2011
4605	2007	India	ERR018111	Mutreja et al. Nature 2011
4593	2007	India	ERR025359	Mutreja et al. Nature 2011
4122	2007	Viet Nam	ERR019885	Mutreja et al. Nature 2011
4585	2007	India	ERR025366	Mutreja et al. Nature 2011
4600	2007	India	ERR025371	Mutreja et al. Nature 2011
4536	2007	India	ERR025375	Mutreja et al. Nature 2011
4623	2007	India	ERR025358	Mutreja et al. Nature 2011
4675	2001	Bangladesh	ERR018113	Mutreja et al. Nature 2011
4661	2001	Bangladesh	ERR018116	Mutreja et al. Nature 2011

A488(2)	2006	Bangladesh	ERR018128	Mutreja et al. Nature 2011
4662	2001	Bangladesh	ERR025373	Mutreja et al. Nature 2011
A487(2)	2007	Bangladesh	ERR018182	Mutreja et al. Nature 2011
4663	2001	Bangladesh	ERR018115	Mutreja et al. Nature 2011
4679	1999	Bangladesh	ERR018114	Mutreja et al. Nature 2011
MBN17	2004	India	ERR018123	Mutreja et al. Nature 2011
4519	2005	India	ERR025374	Mutreja et al. Nature 2011
4538	2007	India	ERR025360	Mutreja et al. Nature 2011
IDHO1'726	2009	India	ERR018187	Mutreja et al. Nature 2011
2010EL_1786	2010	Haiti	CP003069.1/CP003070.1	Reimer et al. EID 2011
2010EL_1792	2010	Haiti	AELJ00000000.1	Reimer et al. EID 2011
2010EL_1798	2010	Haiti	AELI00000000.1	Reimer et al. EID 2011
S9KCH9	2010	Pakistan	ERR051772	Shah et al. EID 2015
S7KCH20	2010	Pakistan	ERR051770	Shah et al. EID 2015
S4KCH16	2010	Pakistan	ERR051767	Shah et al. EID 2015
S2KCH17	2010	Pakistan	ERR051765	Shah et al. EID 2015
S23HH18	2010	Pakistan	ERR051786	Shah et al. EID 2015
S6KCH7	2010	Pakistan	ERR051769	Shah et al. EID 2015
S5KCH10	2010	Pakistan	ERR051768	Shah et al. EID 2015
F8D25	2010	Pakistan	ERR051752	Shah et al. EID 2015
S14P9	2010	Pakistan	ERR051777	Shah et al. EID 2015
F4D48	2010	Pakistan	ERR051748	Shah et al. EID 2015
S26R24	2010	Pakistan	ERR051789	Shah et al. EID 2015
F1DN4	2010	Pakistan	ERR051745	Shah et al. EID 2015
S27RG11	2010	Pakistan	ERR051790	Shah et al. EID 2015
S24RG6	2010	Pakistan	ERR051787	Shah et al. EID 2015
F14KPD3	2010	Pakistan	ERR051758	Shah et al. EID 2015
F2D59	2010	Pakistan	ERR051746	Shah et al. EID 2015
F11D4	2010	Pakistan	ERR051755	Shah et al. EID 2015
F7D30	2010	Pakistan	ERR051751	Shah et al. EID 2015
S22HH17	2010	Pakistan	ERR051785	Shah et al. EID 2015
S20HH14	2010	Pakistan	ERR051783	Shah et al. EID 2015
S16HH1	2010	Pakistan	ERR051779	Shah et al. EID 2015
S8KCH18	2010	Pakistan	ERR051771	Shah et al. EID 2015
F17KTH4	2010	Pakistan	ERR051761	Shah et al. EID 2015
F18KTH3	2010	Pakistan	ERR051762	Shah et al. EID 2015
S17HH3	2010	Pakistan	ERR051780	Shah et al. EID 2015
F12D1	2010	Pakistan	ERR051756	Shah et al. EID 2015

F5D38	2010	Pakistan	ERR051749	Shah et al. EID 2015
S1KCH15	2010	Pakistan	ERR051764	Shah et al. EID 2015
S21HH15	2010	Pakistan	ERR051784	Shah et al. EID 2015
S25R22	2010	Pakistan	ERR051788	Shah et al. EID 2015
S10P57	2010	Pakistan	ERR051773	Shah et al. EID 2015
F19KTH2	2010	Pakistan	ERR051763	Shah et al. EID 2015
S12P76	2010	Pakistan	ERR051775	Shah et al. EID 2015
S13P83	2010	Pakistan	ERR051776	Shah et al. EID 2015
S18HH4	2010	Pakistan	ERR051781	Shah et al. EID 2015
S19HH5	2010	Pakistan	ERR051782	Shah et al. EID 2015
F15KTH7	2010	Pakistan	ERR051759	Shah et al. EID 2015
F16KTH6	2010	Pakistan	ERR051760	Shah et al. EID 2015
CP1040	2004	Zambia	SRR227307	Unpublished EBI-ENA
EM1626	2011	Bangladesh	SRR491153	Unpublished EBI-ENA
CNRVC930061	1961	China	ERR1879565	Weill et al. Science 2017
CNRVC960976	1962	New Guinea	ERR1879629	Weill et al. Science 2017
CNRVC930027	1966	Egypt	ERR976397	Weill et al. Science 2017
CNRVC930060	1961	Philippines	ERR1879564	Weill et al. Science 2017
CNRVC940044	1963	Philippines	ERR1879573	Weill et al. Science 2017
CNRVC950218	1973	Philippines	ERR1879584	Weill et al. Science 2017
CNRVC930067	1963	Cambodia	ERR1879567	Weill et al. Science 2017
CNRVC961129	1964	Viet Nam	ERR1879634	Weill et al. Science 2017
CNRVC950165	1968	Viet Nam	ERR1879582	Weill et al. Science 2017
CNRVC950161	1966	Viet Nam	ERR1879581	Weill et al. Science 2017
CNRVC950172	1969	Viet Nam	ERR1879583	Weill et al. Science 2017
CNRVC961077	1963	Thailand	ERR1879633	Weill et al. Science 2017
CNRVC930036	1962	India	ERR1879562	Weill et al. Science 2017
CNRVC930066	1964	India	ERR1879566	Weill et al. Science 2017
CNRVC950100	1973	Malaysia	ERR1879580	Weill et al. Science 2017
CNRVC930029	1971	Myanmar	ERR1879559	Weill et al. Science 2017
CNRVC950641	1972	Myanmar	ERR1879587	Weill et al. Science 2017
CNRVC960871	1965	Iran	ERR1879606	Weill et al. Science 2017
CNRVC960799	1965	Iran	ERR1879603	Weill et al. Science 2017
CNRVC930076	1965	Iran	ERR1879568	Weill et al. Science 2017
CNRVC960842	1965	Iran	ERR1879605	Weill et al. Science 2017
CNRVC960872	1965	Iran	ERR1879607	Weill et al. Science 2017
CNRVC961005	1964	Pakistan	ERR1879630	Weill et al. Science 2017
CNRVC960800	1965	Iran	ERR1879604	Weill et al. Science 2017

CNRVC960768	1966	Iraq	ERR1879601	Weill et al. Science 2017
CNRVC960778	1966	Iraq	ERR1879602	Weill et al. Science 2017
THSTI_GP160bis	1980	India	ERR1880816	Weill et al. Science 2017
CNRVC150131	1970	Ukraine	ERR1878613	Weill et al. Science 2017
CNRVC961017	1970	Slovakia	ERR1879631	Weill et al. Science 2017
CNRVC961018	1970	Slovakia	ERR1879632	Weill et al. Science 2017
CNRVC930030	1970	Slovakia	ERR1879560	Weill et al. Science 2017
CNRVC930033	1970	Israel	ERR1879561	Weill et al. Science 2017
CNRVC930044	1970	Lebanon	ERR1879563	Weill et al. Science 2017
12_1970	1970	Israel	ERR042749	Weill et al. Science 2017
1_1970	1970	Israel	ERR042745	Weill et al. Science 2017
CNRVC960951	1970	Libya	ERR976471	Weill et al. Science 2017
RKI-ZBS2-CH8	1971	Spain	ERR1880796	Weill et al. Science 2017
CNRVC150244	1973	Italy	ERR1879541	Weill et al. Science 2017
CNRVC950535	1975	Comoros	ERR976451	Weill et al. Science 2017
CNRVC950540	1975	Comoros	ERR976452	Weill et al. Science 2017
CNRVC950543	1975	Comoros	ERR976453	Weill et al. Science 2017
CNRVC960922	1970	Lebanon	ERR1879628	Weill et al. Science 2017
CNRVC140135	1971	Portugal	ERR976506	Weill et al. Science 2017
CNRVC930037	1970	Sierra Leone	ERR976398	Weill et al. Science 2017
CNRVC960629	1970	Guinea	ERR976466	Weill et al. Science 2017
CNRVC140134	1971	Portugal	ERR976505	Weill et al. Science 2017
CNRVC950558	1971	Tunisia	ERR976454	Weill et al. Science 2017
CNRVC950559	1971	Tunisia	ERR976455	Weill et al. Science 2017
CNRVC960949	1970	Libya	ERR976470	Weill et al. Science 2017
CNRVC960635	1970	Guinea	ERR976467	Weill et al. Science 2017
CNRVC950431	1974	Morocco	ERR976445	Weill et al. Science 2017
CNRVC930167	1974	Algeria	ERR976407	Weill et al. Science 2017
CNRVC950468	1972	Morocco	ERR976447	Weill et al. Science 2017
CNRVC950498	1972	Morocco	ERR976450	Weill et al. Science 2017
CNRVC950466	1972	Morocco	ERR976446	Weill et al. Science 2017
CNRVC950476	1972	Morocco	ERR976448	Weill et al. Science 2017
CNRVC960627	1970	Ghana	ERR976465	Weill et al. Science 2017
CNRVC961014	1970	Sierra Leone	ERR976475	Weill et al. Science 2017
CNRVC930127	1970	Guinea	ERR976403	Weill et al. Science 2017
CNRVC950487	1972	Morocco	ERR976449	Weill et al. Science 2017
CNRVC930171	1984	Cote d'Ivoire	ERR976411	Weill et al. Science 2017
CNRVC140136	1971	Portugal	ERR976507	Weill et al. Science 2017

CNRVC950418	1974	Algeria	ERR976444	Weill et al. Science 2017
CNRVC930166	1975	Algeria	ERR976406	Weill et al. Science 2017
CNRVC150228	1973	Tunisia	ERR1879436	Weill et al. Science 2017
CNRVC950376	1974	Tunisia	ERR976441	Weill et al. Science 2017
CNRVC950250	1974	Italy	ERR1879585	Weill et al. Science 2017
CNRVC960946	1970	Liberia	ERR976469	Weill et al. Science 2017
CNRVC960928	1970	Liberia	ERR976468	Weill et al. Science 2017
CNRVC950569	1970	Angola	ERR976457	Weill et al. Science 2017
RKI-ZBS2-CH19	1972	Angola	ERR1880793	Weill et al. Science 2017
CNRVC950568	1970	Angola	ERR976456	Weill et al. Science 2017
CNRVC140137	1974	Portugal	ERR976508	Weill et al. Science 2017
CNRVC140139	1974	Portugal	ERR976510	Weill et al. Science 2017
NICD_69147	1980	Republic of South Africa	ERR1880786	Weill et al. Science 2017
NICD_69173	1980	Republic of South Africa	ERR1880791	Weill et al. Science 2017
NICD_69175	1980	Republic of South Africa	ERR1880792	Weill et al. Science 2017
CNRVC900123	1990	Malawi	ERR976393	Weill et al. Science 2017
CNRVC900105	1990	Angola	ERR976391	Weill et al. Science 2017
CNRVC920194	1990	Angola	ERR976396	Weill et al. Science 2017
CNRVC900117	1990	Malawi	ERR976392	Weill et al. Science 2017
CNRVC920049	1992	Malawi	ERR976523	Weill et al. Science 2017
CNRVC900125	1990	Mozambique	ERR1879547	Weill et al. Science 2017
CNRVC920170	1989	Malawi	ERR976394	Weill et al. Science 2017
C8178	1992	Mozambique	ERR1877616	Weill et al. Science 2017
THSTI_GP106bis	1975	Togo	ERR1880815	Weill et al. Science 2017
CNRVC960579	1970	Benin	ERR976460	Weill et al. Science 2017
CNRVC960575	1970	Benin	ERR976459	Weill et al. Science 2017
CNRVC960623	1970	Ghana	ERR976464	Weill et al. Science 2017
CNRVC950224	1971	Ghana	ERR976430	Weill et al. Science 2017
CNRVC950223	1971	Ghana	ERR976429	Weill et al. Science 2017
CNRVC930079	1970	France	ERR1879569	Weill et al. Science 2017
CNRVC950105	1974	Burkina Faso	ERR976418	Weill et al. Science 2017
CNRVC950343	1972	Senegal	ERR976435	Weill et al. Science 2017
CNRVC950345	1971	Senegal	ERR976436	Weill et al. Science 2017
CNRVC950340	1974	Senegal	ERR1879586	Weill et al. Science 2017
CNRVC950326	1974	Senegal	ERR976434	Weill et al. Science 2017
CNRVC950253	1973	Senegal	ERR976433	Weill et al. Science 2017
CNRVC950106	1974	Burkina Faso	ERR976419	Weill et al. Science 2017
CNRVC950396	1974	Burkina Faso	ERR976442	Weill et al. Science 2017

CNRVC950405	1974	Burkina Faso	ERR976443	Weill et al. Science 2017
CNRVC930042	1970	Cameroon	ERR976400	Weill et al. Science 2017
CNRVC950138	1970	Cameroon	ERR976420	Weill et al. Science 2017
CNRVC950143	1970	Cameroon	ERR976424	Weill et al. Science 2017
CNRVC950141	1970	Cameroon	ERR976422	Weill et al. Science 2017
CNRVC960971	1970	Niger	ERR976474	Weill et al. Science 2017
CNRVC950189	1973	Cote d'Ivoire	ERR976426	Weill et al. Science 2017
CNRVC950191	1973	Cote d'Ivoire	ERR976427	Weill et al. Science 2017
CNRVC950203	1970	Cote d'Ivoire	ERR976428	Weill et al. Science 2017
CNRVC960959	1970	Niger	ERR976473	Weill et al. Science 2017
CNRVC960952	1970	Mali	ERR976472	Weill et al. Science 2017
CNRVC930075	1970	Mali	ERR976402	Weill et al. Science 2017
CNRVC950182	1973	Cote d'Ivoire	ERR976425	Weill et al. Science 2017
CNRVC960552	1970	Cote d'Ivoire	ERR976458	Weill et al. Science 2017
CNRVC950235	1970	Nigeria	ERR976431	Weill et al. Science 2017
CNRVC950238	1970	Nigeria	ERR976432	Weill et al. Science 2017
CNRVC950142	1970	Cameroon	ERR976423	Weill et al. Science 2017
CNRVC950087	1972	Chad	ERR976416	Weill et al. Science 2017
CNRVC950140	1970	Cameroon	ERR976421	Weill et al. Science 2017
CNRVC930046	1971	Chad	ERR976401	Weill et al. Science 2017
CNRVC950040	1972	Chad	ERR976415	Weill et al. Science 2017
CNRVC950366	1974	Chad	ERR976440	Weill et al. Science 2017
CNRVC950364	1972	Chad	ERR976439	Weill et al. Science 2017
CNRVC950360	1974	Chad	ERR976438	Weill et al. Science 2017
CNRVC950358	1974	Chad	ERR976437	Weill et al. Science 2017
CNRVC150217	1982	Ghana/Nigeria	ERR1879391	Weill et al. Science 2017
CNRVC150229	1981	Tunisia	ERR1879437	Weill et al. Science 2017
CNRVC930187	1982	Algeria	ERR976413	Weill et al. Science 2017
CNRVC980046	1985	Benin	ERR976483	Weill et al. Science 2017
F135	1993	Cameroon	ERR1879651	Weill et al. Science 2017
CNRVC930168	1982	Algeria	ERR976408	Weill et al. Science 2017
CNRVC930164	1983	Algeria	ERR976405	Weill et al. Science 2017
CNRVC980041	1984	Mali	ERR976480	Weill et al. Science 2017
CNRVC980043	1985	Mali	ERR976481	Weill et al. Science 2017
CNRVC980040	1984	Burkina Faso	ERR976479	Weill et al. Science 2017
CNRVC980048	1984	Burkina Faso	ERR976485	Weill et al. Science 2017
CNRVC980049	1984	Burkina Faso	ERR976486	Weill et al. Science 2017
CNRVC140132	1988	Angola	ERR976503	Weill et al. Science 2017

CNRVC140129	1988	Angola	ERR976500	Weill et al. Science 2017
SaoTome21	1989	Sao Tome	ERR1880798	Weill et al. Science 2017
CNRVC920176	1989	Sao Tome	ERR1879552	Weill et al. Science 2017
CNRVC140131	1988	Angola	ERR976502	Weill et al. Science 2017
CNRVC140128	1988	Angola	ERR976499	Weill et al. Science 2017
CNRVC140127	1988	Angola	ERR976498	Weill et al. Science 2017
CNRVC140130	1988	Angola	ERR976501	Weill et al. Science 2017
CNRVC920027	1992	Angola	ERR976522	Weill et al. Science 2017
CNRVC940011	1994	Angola	ERR976532	Weill et al. Science 2017
CNRVC940012	1994	Angola	ERR976533	Weill et al. Science 2017
CNRVC950007	1995	Angola	ERR998665	Weill et al. Science 2017
CNRVC950002	1995	Angola	ERR998664	Weill et al. Science 2017
CNRVC150245	1988	Cote d'Ivoire	ERR1879542	Weill et al. Science 2017
CNRVC140140	1988	Cote d'Ivoire	ERR976511	Weill et al. Science 2017
CNRVC150227	1988	Cote d'Ivoire	ERR1879435	Weill et al. Science 2017
CNRVC150231	1988	Cote d'Ivoire	ERR1879535	Weill et al. Science 2017
CNRVC140141	1988	Cote d'Ivoire	ERR976512	Weill et al. Science 2017
CNRVC150210	1988	Cote d'Ivoire	ERR1879384	Weill et al. Science 2017
C8798	1992	Uganda	ERR1877619	Weill et al. Science 2017
F4170	1997	Nigeria	ERR1879657	Weill et al. Science 2017
C8799	1992	Uganda	ERR1877636	Weill et al. Science 2017
CNRVC960918	1970	Jordan	ERR1879627	Weill et al. Science 2017
CNRVC150132	1974	Ukraine	ERR1878614	Weill et al. Science 2017
CNRVC960596	1970	Ethiopia	ERR976463	Weill et al. Science 2017
CNRVC930038	1970	Ethiopia	ERR976399	Weill et al. Science 2017
CNRVC960891	1970	Israel	ERR1879624	Weill et al. Science 2017
4_1970	1970	Israel	ERR042748	Weill et al. Science 2017
CNRVC960899	1970	Israel	ERR1879625	Weill et al. Science 2017
CNRVC960911	1970	Israel	ERR1879626	Weill et al. Science 2017
CNRVC150216	1976	Turkey	ERR1879390	Weill et al. Science 2017
CNRVC150214	1981	Romania	ERR1879388	Weill et al. Science 2017
RKI-ZBS2-CH99	1980	Turkey	ERR1880797	Weill et al. Science 2017
CNRVC150218	1985	Ethiopia	ERR1879392	Weill et al. Science 2017
CNRVC150234	1985	Somalia	ERR1879536	Weill et al. Science 2017
CNRVC980044	1985	Djibouti	ERR976482	Weill et al. Science 2017
CNRVC980039	1985	Djibouti	ERR976478	Weill et al. Science 2017
CNRVC150236	1985	Somalia	ERR1879537	Weill et al. Science 2017
CNRVC980050	1984_1986	Democratic Republic of the Congo	ERR976487	Weill et al. Science 2017

CNRVC930170	1984	Democratic Republic of the Congo	ERR976410	Weill et al. Science 2017
CNRVC980047	1988	Democratic Republic of the Congo	ERR976484	Weill et al. Science 2017
CNRVC930163	1988	Democratic Republic of the Congo	ERR976404	Weill et al. Science 2017
CNRVC920169	1992	Democratic Republic of the Congo	ERR976524	Weill et al. Science 2017
CNRVC930185	1993	Democratic Republic of the Congo	ERR976526	Weill et al. Science 2017
CNRVC910429	1991	Democratic Republic of the Congo	ERR976521	Weill et al. Science 2017
CNRVC930153	1993	Democratic Republic of the Congo	ERR976525	Weill et al. Science 2017
F5197	1998	Zambia	ERR1880764	Weill et al. Science 2017
F5198	1998	Zambia	ERR1880765	Weill et al. Science 2017
B9631	1998	Rwanda	ERR1877614	Weill et al. Science 2017
B9632	1998	Rwanda	ERR1877615	Weill et al. Science 2017
CNRVC940051	1988	Rwanda	ERR976414	Weill et al. Science 2017
CNRVC970056	1997	Burundi	ERR1879636	Weill et al. Science 2017
CNRVC960328	1996	Rwanda	ERR998721	Weill et al. Science 2017
CNRVC960329	1996	Rwanda	ERR998722	Weill et al. Science 2017
CNRVC940173	1994	Democratic Republic of the Congo	ERR998659	Weill et al. Science 2017
CNRVC940143	1994	Democratic Republic of the Congo	ERR976544	Weill et al. Science 2017
CNRVC960308	1996	Democratic Republic of the Congo	ERR998714	Weill et al. Science 2017
CNRVC960312	1996	Rwanda	ERR998715	Weill et al. Science 2017
CNRVC960317	1996	Rwanda	ERR998716	Weill et al. Science 2017
CNRVC960299	1996	Rwanda	ERR998713	Weill et al. Science 2017
CNRVC970058	1997	Democratic Republic of the Congo	ERR998733	Weill et al. Science 2017
CNRVC970004	1997	Democratic Republic of the Congo	ERR998723	Weill et al. Science 2017
CNRVC970007	1997	Democratic Republic of the Congo	ERR998724	Weill et al. Science 2017
C8465	1992	Burundi	ERR1877617	Weill et al. Science 2017
C8466	1992	Burundi	ERR1877618	Weill et al. Science 2017
CNRVC930425	1993	Burundi	ERR976530	Weill et al. Science 2017
CNRVC950693	1995	Democratic Republic of the Congo	ERR998667	Weill et al. Science 2017
CNRVC940131	1994	Democratic Republic of the Congo	ERR976540	Weill et al. Science 2017
CNRVC950746	1995	Democratic Republic of the Congo	ERR998681	Weill et al. Science 2017
CNRVC950695	1995	Democratic Republic of the Congo	ERR998669	Weill et al. Science 2017
CNRVC950694	1995	Democratic Republic of the Congo	ERR998668	Weill et al. Science 2017
CNRVC930409	1993	Rwanda	ERR976528	Weill et al. Science 2017
CNRVC930428	1993	Tanzania	ERR976531	Weill et al. Science 2017
CNRVC930417	1993	Burundi	ERR976529	Weill et al. Science 2017
F3397	1996	Zambia_Republic of South Africa	ERR1879653	Weill et al. Science 2017
F3403	1996	Zambia_Republic of South Africa	ERR1879654	Weill et al. Science 2017
329_02	1996	Zambia	ERR164758	Weill et al. Science 2017

330_02	1997	Zambia	ERR164760	Weill et al. Science 2017
354_02	1996	Zambia	ERR044794	Weill et al. Science 2017
F3835	1997	Tanzania	ERR1879655	Weill et al. Science 2017
CNRVC970064	1997	Democratic Republic of the Congo	ERR998734	Weill et al. Science 2017
CNRVC970176	1997	Democratic Republic of the Congo	ERR976550	Weill et al. Science 2017
CNRVC970174	1997	Democratic Republic of the Congo	ERR976548	Weill et al. Science 2017
F5097	1997	Malawi	ERR1880761	Weill et al. Science 2017
F5096	1997	Malawi	ERR1879658	Weill et al. Science 2017
20_03	1997	Zambia	ERR164763	Weill et al. Science 2017
177_03	1997	Zambia	ERR164759	Weill et al. Science 2017
280_02	1996	Zambia	ERR164757	Weill et al. Science 2017
CNRVC910040	1991	Cambodia	ERR1879548	Weill et al. Science 2017
CNRVC920171	1983	Viet Nam	ERR1879551	Weill et al. Science 2017
CNRVC930174	1981	Sri Lanka	ERR1879571	Weill et al. Science 2017
THSTI_V12	1989	India	ERR1880838	Weill et al. Science 2017
THSTI_V108	1990	India	ERR1880837	Weill et al. Science 2017
THSTI_V149	1990	India	ERR1880839	Weill et al. Science 2017
CNRVC150222	1987	Romania	ERR1879431	Weill et al. Science 2017
CNRVC150224	1990	Romania	ERR1879433	Weill et al. Science 2017
CNRVC150134	1990	Russian Federation	ERR1878616	Weill et al. Science 2017
CNRVC150133	1990	Russian Federation	ERR1878615	Weill et al. Science 2017
CNRVC910164	1991	Turkey	ERR1879549	Weill et al. Science 2017
CNRVC910416	1991	Kurdistan	ERR1879550	Weill et al. Science 2017
F1393	1993	Djibouti	ERR1879652	Weill et al. Science 2017
CNRVC930301	1993	Djibouti	ERR1879572	Weill et al. Science 2017
CNRVC010017	1994	Djibouti	ERR976598	Weill et al. Science 2017
CNRVC010018	1994	Djibouti	ERR976599	Weill et al. Science 2017
CNRVC960142	1996	Sudan	ERR1879595	Weill et al. Science 2017
CNRVC960276	1996	Sudan	ERR1879600	Weill et al. Science 2017
CNRVC150252	1998	Kenya	ERR1879544	Weill et al. Science 2017
CNRVC150251	1998	Kenya	ERR1879543	Weill et al. Science 2017
CNRVC150211	1998	Kenya	ERR1879385	Weill et al. Science 2017
CNRVC010015	1994	Djibouti	ERR976597	Weill et al. Science 2017
CNRVC940066	1994	Somalia	ERR1879575	Weill et al. Science 2017
CNRVC970175	1997	Djibouti	ERR976549	Weill et al. Science 2017
CNRVC980158	1997	Djibouti	ERR976565	Weill et al. Science 2017
CNRVC970177	1997	Djibouti	ERR976551	Weill et al. Science 2017
CNRVC150213	1998	Ethiopia	ERR1879387	Weill et al. Science 2017

CNRVC150254	1998	Ethiopia	ERR1879545	Weill et al. Science 2017
CNRVC970053	1997	Somalia	ERR998732	Weill et al. Science 2017
CNRVC990002	1999	Somalia	ERR976583	Weill et al. Science 2017
CNRVC030392	2003	Somalia	ERR1878095	Weill et al. Science 2017
CNRVC030391	2003	Somalia	ERR1878094	Weill et al. Science 2017
CNRVC010046	2000	Djibouti	ERR1877649	Weill et al. Science 2017
CNRVC010048	2000	Djibouti	ERR1877938	Weill et al. Science 2017
CNRVC930169	1986	Algeria	ERR976409	Weill et al. Science 2017
CNRVC930172	1986	Algeria	ERR976412	Weill et al. Science 2017
CNRVC920172	1987	Algeria	ERR976395	Weill et al. Science 2017
CNRVC970008	1990	Algeria	ERR976476	Weill et al. Science 2017
CNRVC910349	1991	Morocco	ERR976518	Weill et al. Science 2017
CNRVC910347	1991	Morocco	ERR976517	Weill et al. Science 2017
CNRVC940137	1994	Morocco	ERR976541	Weill et al. Science 2017
CNRVC930255	1993	Morocco	ERR976527	Weill et al. Science 2017
CNRVC910386	1991	Morocco	ERR976520	Weill et al. Science 2017
CNRVC940180	1994	Morocco	ERR998661	Weill et al. Science 2017
CNRVC940179	1994	Morocco	ERR998660	Weill et al. Science 2017
CNRVC980038	1986	Sierra Leone	ERR976477	Weill et al. Science 2017
CNRVC900108	1990	Guinea	ERR1879546	Weill et al. Science 2017
CNRVC910036	1991	Benin	ERR976513	Weill et al. Science 2017
CNRVC940030	1993	Cote d'Ivoire	ERR976534	Weill et al. Science 2017
CNRVC940035	1993	Cote d'Ivoire	ERR976536	Weill et al. Science 2017
CNRVC940162	1994	Liberia	ERR976546	Weill et al. Science 2017
CNRVC940147	1994	Liberia	ERR976545	Weill et al. Science 2017
CNRVC910375	1991	Cote d'Ivoire	ERR976519	Weill et al. Science 2017
CNRVC980421	1998	Cote d'Ivoire	ERR976582	Weill et al. Science 2017
CNRVC980420	1998	Cote d'Ivoire	ERR976581	Weill et al. Science 2017
CNRVC950702	1995	Burkina Faso	ERR998672	Weill et al. Science 2017
CNRVC950700	1995	Burkina Faso	ERR998671	Weill et al. Science 2017
CNRVC910266	1991	Benin	ERR976514	Weill et al. Science 2017
CNRVC910267	1991	Benin	ERR976515	Weill et al. Science 2017
CNRVC910279	1991	Niger	ERR976516	Weill et al. Science 2017
CNRVC950011	1995	Cameroon	ERR998666	Weill et al. Science 2017
CNRVC940163	1994	Chad	ERR998656	Weill et al. Science 2017
CNRVC940184	1994	Chad	ERR998662	Weill et al. Science 2017
CNRVC980418	1998	Sierra Leone	ERR976580	Weill et al. Science 2017
CNRVC940034	1994	Cote d'Ivoire	ERR976535	Weill et al. Science 2017

CNRVC970036	1997	Cameroon	ERR998731	Weill et al. Science 2017
CNRVC970022	1997	Cameroon	ERR998727	Weill et al. Science 2017
CNRVC970024	1997	Cameroon	ERR998728	Weill et al. Science 2017
CNRVC980323	1998	Cameroon	ERR976568	Weill et al. Science 2017
CNRVC980328	1998	Cameroon	ERR976570	Weill et al. Science 2017
CNRVC980060	1998	Cameroon	ERR976561	Weill et al. Science 2017
CNRVC980061	1998	Cameroon	ERR976562	Weill et al. Science 2017
CNRVC990329	1999	Cameroon	ERR1879650	Weill et al. Science 2017
CNRVC940190	1994	Niger	ERR998663	Weill et al. Science 2017
CNRVC970113	1997	Democratic Republic of the Congo	ERR998741	Weill et al. Science 2017
CNRVC990256	1999	Republic of the Congo	ERR1879647	Weill et al. Science 2017
CNRVC970028	1997	Democratic Republic of the Congo	ERR998730	Weill et al. Science 2017
CNRVC970135	1997	Democratic Republic of the Congo	ERR998746	Weill et al. Science 2017
CNRVC970027	1997	Democratic Republic of the Congo	ERR998729	Weill et al. Science 2017
CNRVC980034	1998	Republic of the Congo	ERR976560	Weill et al. Science 2017
CNRVC970170	1997	Gabon	ERR976547	Weill et al. Science 2017
CNRVC980030	1998	Republic of the Congo	ERR976559	Weill et al. Science 2017
CNRVC960218	1996	Democratic Republic of the Congo	ERR998698	Weill et al. Science 2017
CNRVC960118	1996	Democratic Republic of the Congo	ERR998694	Weill et al. Science 2017
CNRVC960127	1996	Democratic Republic of the Congo	ERR998697	Weill et al. Science 2017
CNRVC960124	1996	Democratic Republic of the Congo	ERR998696	Weill et al. Science 2017
CNRVC970075	1997	Central African Republic	ERR998735	Weill et al. Science 2017
CNRVC970141	1997	Central African Republic	ERR998747	Weill et al. Science 2017
CNRVC970126	1997	Central African Republic	ERR998744	Weill et al. Science 2017
CNRVC970127	1997	Central African Republic	ERR998745	Weill et al. Science 2017
CNRVC970143	1997	Central African Republic	ERR998748	Weill et al. Science 2017
CNRVC970109	1997	Central African Republic	ERR998738	Weill et al. Science 2017
CNRVC970108	1997	Central African Republic	ERR998737	Weill et al. Science 2017
CNRVC970079	1997	Central African Republic	ERR998736	Weill et al. Science 2017
CNRVC150220	1992	Pakistan	ERR1879429	Weill et al. Science 2017
CNRVC940047	1991	Romania	ERR1879574	Weill et al. Science 2017
CNRVC150221	1991	Romania	ERR1879430	Weill et al. Science 2017
CNRVC150239	1993	Cambodia	ERR1879538	Weill et al. Science 2017
CNRVC930155	1993	Thailand	ERR1879570	Weill et al. Science 2017
CNRVC010100	2001	Indonesia	ERR1877943	Weill et al. Science 2017
CNRVC990209	1999	Laos	ERR1879645	Weill et al. Science 2017
CNRVC990194	1999	Cambodia	ERR1879644	Weill et al. Science 2017
THSTI_V157	1991	India	ERR1880841	Weill et al. Science 2017

THSTI_V156	1991	India	ERR1880840	Weill et al. Science 2017
CNRVC930003	1992	India	ERR1879553	Weill et al. Science 2017
CNRVC150223	1993	Lebanon	ERR1879432	Weill et al. Science 2017
CNRVC150215	1993	Lebanon	ERR1879389	Weill et al. Science 2017
CNRVC150230	1994	Italy	ERR1879438	Weill et al. Science 2017
CNRVC940149	1994	Albania	ERR1879577	Weill et al. Science 2017
RKI-ZBS2-CH218	1994	Turkey	ERR1880794	Weill et al. Science 2017
Gaz2	1994	Palestine	ERR042729	Weill et al. Science 2017
Gaz11	1994	Palestine	ERR042733	Weill et al. Science 2017
Gaz21	1994	Palestine	ERR042738	Weill et al. Science 2017
CNRVC150219	1994	Romania	ERR1879393	Weill et al. Science 2017
CNRVC070120	1994	Algeria	ERR1878555	Weill et al. Science 2017
CNRVC070154	1994	Algeria	ERR1878560	Weill et al. Science 2017
CNRVC950798	1995	Iraq	ERR1879593	Weill et al. Science 2017
CNRVC950792	1995	Iraq	ERR1879588	Weill et al. Science 2017
CNRVC950800	1995	Iraq	ERR1879594	Weill et al. Science 2017
CNRVC030438	2003	Iraq	ERR1878096	Weill et al. Science 2017
NICD_14794	2001	Republic of South Africa	ERR1880779	Weill et al. Science 2017
NICD_15070	2001	Republic of South Africa	ERR1880780	Weill et al. Science 2017
NICD_16230	2001	Republic of South Africa	ERR1880785	Weill et al. Science 2017
NICD_14191	2001	Republic of South Africa	ERR1880778	Weill et al. Science 2017
NICD_1405	2001	Republic of South Africa	ERR1880777	Weill et al. Science 2017
NICD_1264	2001	Republic of South Africa	ERR1880776	Weill et al. Science 2017
NICD_1241	2001	Republic of South Africa	ERR1880774	Weill et al. Science 2017
NICD_1242	2001	Republic of South Africa	ERR1880775	Weill et al. Science 2017
NICD_273	1998	Republic of South Africa	ERR1880789	Weill et al. Science 2017
NICD_16879	2001	Republic of South Africa	ERR1880788	Weill et al. Science 2017
NICD_4076	2001	Republic of South Africa	ERR1880790	Weill et al. Science 2017
NICD_15104	2001	Republic of South Africa	ERR1880781	Weill et al. Science 2017
F8478	2002	Republic of South Africa	ERR1880768	Weill et al. Science 2017
F8479	2002	Republic of South Africa	ERR1880769	Weill et al. Science 2017
F5149	1997	Mozambique	ERR1880763	Weill et al. Science 2017
CNRVC990019	1999	Mozambique	ERR976585	Weill et al. Science 2017
CNRVC990038	1999	Mozambique	ERR976586	Weill et al. Science 2017
CNRVC990039	1999	Mozambique	ERR976587	Weill et al. Science 2017
NICD_15959	2001	Republic of South Africa	ERR1880783	Weill et al. Science 2017
NICD_16756	2001	Republic of South Africa	ERR1880787	Weill et al. Science 2017
NICD_16211	2001	Republic of South Africa	ERR1880784	Weill et al. Science 2017

NICD_15907	2001	Republic of South Africa	ERR1880782	Weill et al. Science 2017
NICD_16744	2001	Republic of South Africa	ERR1877613	Weill et al. Science 2017
Zim_27	2009	Zimbabwe	ERR044800	Weill et al. Science 2017
Zim_25	2009	Zimbabwe	ERR044799	Weill et al. Science 2017
B_64	2004	Mozambique	ERR044797	Weill et al. Science 2017
THSTI_V8	1989	India	ERR1880842	Weill et al. Science 2017
THSTI_VC63	1992	India	ERR1880844	Weill et al. Science 2017
CNRVC940135	1994	Nepal	ERR1879576	Weill et al. Science 2017
THSTI_CO327	1993	India	ERR1880804	Weill et al. Science 2017
THSTI_CO368	1993	India	ERR1880805	Weill et al. Science 2017
CNRVC940164	1994	Liberia	ERR998657	Weill et al. Science 2017
CNRVC950699	1995	Guinea	ERR998670	Weill et al. Science 2017
RKI-ZBS2-CH234	1994	Turkey	ERR1880795	Weill et al. Science 2017
CNRVC940103	1994	Guinea	ERR976537	Weill et al. Science 2017
CNRVC950712	1995	Sierra Leone	ERR998675	Weill et al. Science 2017
CNRVC140133	1994-1995	Guinea Bissau	ERR976504	Weill et al. Science 2017
CNRVC950758	1995	Cote d'Ivoire	ERR998685	Weill et al. Science 2017
CNRVC940128	1994	Guinea	ERR976539	Weill et al. Science 2017
CNRVC940109	1994	Guinea	ERR976538	Weill et al. Science 2017
CNRVC940141	1994	Guinea	ERR976542	Weill et al. Science 2017
CNRVC950724	1995	Guinea	ERR998677	Weill et al. Science 2017
CNRVC950723	1995	Guinea	ERR998676	Weill et al. Science 2017
F5144	1997	Guinea Bissau	ERR1880762	Weill et al. Science 2017
CNRVC960324	1996	Senegal	ERR998719	Weill et al. Science 2017
CNRVC960321	1996	Senegal	ERR998718	Weill et al. Science 2017
CNRVC960327	1996	Senegal	ERR998720	Weill et al. Science 2017
CNRVC960318	1996	Senegal	ERR998717	Weill et al. Science 2017
CNRVC960263	1996	Mauritania	ERR1879599	Weill et al. Science 2017
CNRVC960260	1996	Mauritania	ERR1879598	Weill et al. Science 2017
CNRVC960018	1996	Senegal	ERR998690	Weill et al. Science 2017
CNRVC960023	1996	Senegal	ERR998691	Weill et al. Science 2017
CNRVC150226	1994	Senegal	ERR1879434	Weill et al. Science 2017
CNRVC960122	1996	Senegal	ERR998695	Weill et al. Science 2017
CNRVC960272	1996	Senegal	ERR998710	Weill et al. Science 2017
CNRVC960031	1996	Senegal	ERR998693	Weill et al. Science 2017
CNRVC940142	1994	Liberia	ERR976543	Weill et al. Science 2017
CNRVC940165	1994	Liberia	ERR998658	Weill et al. Science 2017
CNRVC950730	1995	Liberia	ERR998679	Weill et al. Science 2017

CNRVC950728	1995	Liberia	ERR998678	Weill et al. Science 2017
CNRVC950756	1995	Cote d'Ivoire	ERR998684	Weill et al. Science 2017
CNRVC960223	1996	Liberia	ERR998699	Weill et al. Science 2017
CNRVC010042	2001	Cote d'Ivoire	ERR1877647	Weill et al. Science 2017
CNRVC010038	2001	Cote d'Ivoire	ERR1877646	Weill et al. Science 2017
CNRVC030567	2003	Cote d'Ivoire	ERR1878102	Weill et al. Science 2017
CNRVC020404	2002	Cote d'Ivoire	ERR1878089	Weill et al. Science 2017
CNRVC030485	2003	Cote d'Ivoire	ERR1878100	Weill et al. Science 2017
CNRVC980367	1998	Guinea	ERR976574	Weill et al. Science 2017
CNRVC030477	2003	Liberia	ERR1878099	Weill et al. Science 2017
CNRVC030475	2003	Liberia	ERR1878098	Weill et al. Science 2017
CNRVC020393	2002	Liberia	ERR1878088	Weill et al. Science 2017
CNRVC020062	2002	Liberia	ERR1877954	Weill et al. Science 2017
CNRVC080496	2006	Cote d'Ivoire	ERR1878571	Weill et al. Science 2017
L237	2012	Guinea	ERR386704	Weill et al. Science 2017
L211	2012	Guinea	ERR386666	Weill et al. Science 2017
L233	2012	Guinea	ERR386658	Weill et al. Science 2017
CNRVC120195	2012	Guinea Bissau	ERR1878605	Weill et al. Science 2017
CNRVC120194	2012	Guinea Bissau	ERR1878604	Weill et al. Science 2017
K6975	2008	Guinea Bissau	ERR1880772	Weill et al. Science 2017
K6979	2008	Guinea Bissau	ERR1880773	Weill et al. Science 2017
CNRVC040206	2004	Guinea	ERR1878112	Weill et al. Science 2017
CNRVC040203	2004	Sierra Leone	ERR1878111	Weill et al. Science 2017
CNRVC040257	2004	Sierra Leone	ERR1878115	Weill et al. Science 2017
CNRVC040314	2004	Senegal	ERR1878127	Weill et al. Science 2017
CNRVC060010	2005	Mali	ERR1878150	Weill et al. Science 2017
CNRVC070136	2006	Mauritania	ERR1878557	Weill et al. Science 2017
CNRVC070144	2005	Mauritania	ERR1878559	Weill et al. Science 2017
CNRVC040303	2004	Senegal	ERR1878117	Weill et al. Science 2017
CNRVC060009	2006	Mali	ERR1878149	Weill et al. Science 2017
CNRVC070142	2006	Mauritania	ERR1878558	Weill et al. Science 2017
CNRVC070124	2005	Mauritania	ERR1878556	Weill et al. Science 2017
CNRVC960250	1996	Mali	ERR998704	Weill et al. Science 2017
CNRVC950753	1995	Cote d'Ivoire	ERR998682	Weill et al. Science 2017
CNRVC950801	1995	Burkina Faso	ERR998687	Weill et al. Science 2017
CNRVC950806	1995	Burkina Faso	ERR998688	Weill et al. Science 2017
CNRVC950707	1995	Mali	ERR998673	Weill et al. Science 2017
CNRVC950708	1995	Mali	ERR998674	Weill et al. Science 2017

CNRVC950755	1995	Cote d'Ivoire	ERR998683	Weill et al. Science 2017
CNRVC950759	1995	Niger	ERR998686	Weill et al. Science 2017
CNRVC970152	1997	Benin	ERR998750	Weill et al. Science 2017
CNRVC970147	1997	Benin	ERR998749	Weill et al. Science 2017
CNRVC960003	1996	Niger	ERR998689	Weill et al. Science 2017
CNRVC970019	1997	Cameroon	ERR998726	Weill et al. Science 2017
CNRVC970110	1997	Central African Republic	ERR998739	Weill et al. Science 2017
CNRVC970112	1997	Central African Republic	ERR998740	Weill et al. Science 2017
CNRVC980022	1997	Cameroon	ERR976555	Weill et al. Science 2017
CNRVC970123	1997	Central African Republic	ERR998742	Weill et al. Science 2017
CNRVC970125	1997	Central African Republic	ERR998743	Weill et al. Science 2017
CNRVC980021	1997	Cameroon	ERR976554	Weill et al. Science 2017
F4169	1997	Nigeria	ERR1879656	Weill et al. Science 2017
CNRVC960243	1996	Chad	ERR998702	Weill et al. Science 2017
CNRVC960254	1996	Nigeria	ERR998706	Weill et al. Science 2017
CNRVC980396	1998	Cameroon	ERR976577	Weill et al. Science 2017
CNRVC980374	1998	Chad	ERR1879638	Weill et al. Science 2017
CNRVC980398	1998	Cameroon	ERR976579	Weill et al. Science 2017
CNRVC980395	1998	Cameroon	ERR976576	Weill et al. Science 2017
CNRVC980397	1998	Cameroon	ERR976578	Weill et al. Science 2017
CNRVC960273	1996	Chad	ERR998711	Weill et al. Science 2017
CNRVC970014	1997	Cameroon	ERR998725	Weill et al. Science 2017
CNRVC960246	1996	Cameroon	ERR998703	Weill et al. Science 2017
CNRVC960293	1996	Cameroon	ERR998712	Weill et al. Science 2017
CNRVC960271	1996	Nigeria	ERR998709	Weill et al. Science 2017
CNRVC960234	1996	Chad	ERR998701	Weill et al. Science 2017
CNRVC960228	1996	Chad	ERR998700	Weill et al. Science 2017
CNRVC960028	1996	Nigeria	ERR998692	Weill et al. Science 2017
CNRVC960252	1996	Nigeria	ERR998705	Weill et al. Science 2017
CNRVC960258	1996	Nigeria	ERR998707	Weill et al. Science 2017
CNRVC960265	1996	Chad	ERR998708	Weill et al. Science 2017
CNRVC980360	1998	Burkina Faso	ERR976573	Weill et al. Science 2017
CNRVC980359	1998	Burkina Faso	ERR976572	Weill et al. Science 2017
CNRVC000005	1999	Niger	ERR1877637	Weill et al. Science 2017
CNRVC010023	2000	Cameroon	ERR1877645	Weill et al. Science 2017
CNRVC000323	2000	Cameroon	ERR1877643	Weill et al. Science 2017
CNRVC990234	1999	Burkina Faso	ERR1879646	Weill et al. Science 2017
CNRVC010108	2001	Togo	ERR1877944	Weill et al. Science 2017

CNRVC010205	2001	Burkina Faso	ERR1877948	Weill et al. Science 2017
CNRVC010206	2001	Burkina Faso	ERR1877949	Weill et al. Science 2017
CNRVC040210	2004	Niger	ERR1878114	Weill et al. Science 2017
CNRVC050334	2005	Nigeria	ERR1878147	Weill et al. Science 2017
CNRVC050323	2005	Nigeria	ERR1878146	Weill et al. Science 2017
CNRVC010123	2001	Chad	ERR1877946	Weill et al. Science 2017
CNRVC010221	2001	Cameroon	ERR1877950	Weill et al. Science 2017
CNRVC010120	2001	Chad	ERR1877945	Weill et al. Science 2017
CNRVC010203	2001	Chad	ERR1877947	Weill et al. Science 2017
CNRVC050073	2005	Equatorial Guinea	ERR1878131	Weill et al. Science 2017
CNRVC050060	2005	Equatorial Guinea	ERR1878130	Weill et al. Science 2017
CNRVC070012	2007	Republic of the Congo	ERR1878550	Weill et al. Science 2017
CNRVC070011	2007	Republic of the Congo	ERR1878549	Weill et al. Science 2017
CNRVC040061	2004	Cameroon	ERR1878105	Weill et al. Science 2017
CNRVC080764	2008	Cameroon	ERR1878574	Weill et al. Science 2017
CNRVC080762	2008	Cameroon	ERR1878573	Weill et al. Science 2017
CNRVC060111	2006	Cameroon	ERR1878152	Weill et al. Science 2017
CNRVC050011	2005	Cameroon	ERR1878129	Weill et al. Science 2017
CNRVC040082	2002	Cameroon	ERR1878107	Weill et al. Science 2017
CNRVC040110	2004	Cameroon	ERR1878108	Weill et al. Science 2017
CNRVC040074	2001	Cameroon	ERR1878106	Weill et al. Science 2017
CNRVC050008	2005	Cameroon	ERR1878128	Weill et al. Science 2017
CNRVC030084	2003	Benin	ERR1878092	Weill et al. Science 2017
CNRVC020367	2002	Benin	ERR1877957	Weill et al. Science 2017
CNRVC020361	2002	Benin	ERR1877956	Weill et al. Science 2017
CNRVC030082	2003	Benin	ERR1878091	Weill et al. Science 2017
CNRVC040127	2004	Benin	ERR1878109	Weill et al. Science 2017
CNRVC040209	2004	Niger	ERR1878113	Weill et al. Science 2017
K0107	2003	Mali	ERR1880770	Weill et al. Science 2017
K0108	2003	Mali	ERR1880771	Weill et al. Science 2017
CNRVC040132	2004	Benin	ERR1878110	Weill et al. Science 2017
CNRVC060273	2006	Niger	ERR1878545	Weill et al. Science 2017
CNRVC070164	2007	Benin	ERR1878561	Weill et al. Science 2017
CNRVC050140	2005	Benin	ERR1878134	Weill et al. Science 2017
CNRVC050139	2005	Benin	ERR1878133	Weill et al. Science 2017
CNRVC080497	2006	Cote d'Ivoire	ERR1878572	Weill et al. Science 2017
CNRVC070334	2005	Burkina Faso	ERR1878563	Weill et al. Science 2017
CNRVC070316	2005	Burkina Faso	ERR1878562	Weill et al. Science 2017

CNRVC060272	2006	Niger	ERR1878544	Weill et al. Science 2017
CNRVC060279	2006	Nigeria	ERR1878546	Weill et al. Science 2017
CNRVC060280	2006	Nigeria	ERR1878547	Weill et al. Science 2017
CNRVC080124	2008	Niger	ERR1878566	Weill et al. Science 2017
CNRVC080122	2008	Niger	ERR1878565	Weill et al. Science 2017
CNRVC100176	2010	Benin	ERR1878586	Weill et al. Science 2017
712_11	2011	Ghana	ERR1024518	Weill et al. Science 2017
CNRVC100183	2010	Benin	ERR1878587	Weill et al. Science 2017
L399	2011	Togo	ERR572582	Weill et al. Science 2017
L400	2011	Togo	ERR572840	Weill et al. Science 2017
L390	2010	Togo	ERR572574	Weill et al. Science 2017
L388	2010	Togo	ERR572572	Weill et al. Science 2017
L387	2010	Togo	ERR572571	Weill et al. Science 2017
THSTI_D31153	1998	India	ERR1880812	Weill et al. Science 2017
THSTI_AM305	1997	India	ERR1880801	Weill et al. Science 2017
F5332	1998	Tanzania	ERR1880766	Weill et al. Science 2017
CNRVC150243	1998	Kenya	ERR1879540	Weill et al. Science 2017
CNRVC150240	1998	Kenya	ERR1879539	Weill et al. Science 2017
CNRVC150212	1998	Tanzania	ERR1879386	Weill et al. Science 2017
CNRVC030593	2003	Comoros	ERR1878103	Weill et al. Science 2017
CNRVC030594	2003	Comoros	ERR1878104	Weill et al. Science 2017
CNRVC020003	2002	Comoros	ERR1877953	Weill et al. Science 2017
F5333	1998	Tanzania	ERR1880767	Weill et al. Science 2017
CNRVC980324	1998	Rwanda	ERR976569	Weill et al. Science 2017
CNRVC010061	2001	Burundi	ERR1877941	Weill et al. Science 2017
CNRVC010062	2001	Burundi	ERR1877942	Weill et al. Science 2017
CNRVC010254	2001	Democratic Republic of the Congo	ERR1877952	Weill et al. Science 2017
CNRVC060153	2006	Democratic Republic of the Congo	ERR1878155	Weill et al. Science 2017
CNRVC050284	2005	Democratic Republic of the Congo	ERR1878136	Weill et al. Science 2017
L284	2008	Democratic Republic of the Congo	ERR572757	Weill et al. Science 2017
CNRVC080383	2008	South Sudan	ERR1878569	Weill et al. Science 2017
L363	2013	Democratic Republic of the Congo	ERR572559	Weill et al. Science 2017
L377	2013	Democratic Republic of the Congo	ERR572836	Weill et al. Science 2017
L78	2009	Democratic Republic of the Congo	ERR572538	Weill et al. Science 2017
3	2009	Democratic Republic of the Congo	ERR386690	Weill et al. Science 2017
217	2009	Democratic Republic of the Congo	ERR386672	Weill et al. Science 2017
L342	2001	Democratic Republic of the Congo	ERR572810	Weill et al. Science 2017
CNRVC010243	2001	Democratic Republic of the Congo	ERR1877951	Weill et al. Science 2017

CNRVC020284	2002	Democratic Republic of the Congo	ERR1877955	Weill et al. Science 2017
CNRVC030293	2003	Democratic Republic of the Congo	ERR1878093	Weill et al. Science 2017
259_01	2004	Zambia	ERR164773	Weill et al. Science 2017
169_12	2003	Zambia	ERR164765	Weill et al. Science 2017
218_02	2003	Zambia	ERR164766	Weill et al. Science 2017
336_01	2004	Zambia	ERR164776	Weill et al. Science 2017
329_01	2004	Zambia	ERR164768	Weill et al. Science 2017
204_12	2003	Zambia	ERR044795	Weill et al. Science 2017
CNRVC030519	2002	Democratic Republic of the Congo	ERR1878101	Weill et al. Science 2017
CNRVC060003	2006	Democratic Republic of the Congo	ERR1878148	Weill et al. Science 2017
CNRVC070045	2007	Democratic Republic of the Congo	ERR1878552	Weill et al. Science 2017
2	2009	Democratic Republic of the Congo	ERR386683	Weill et al. Science 2017
CNRVC080370	2008	Democratic Republic of the Congo	ERR1878568	Weill et al. Science 2017
CNRVC080133	2008	Democratic Republic of the Congo	ERR1878567	Weill et al. Science 2017
CNRVC100062	2010	Zambia	ERR1878582	Weill et al. Science 2017
CNRVC100057	2010	Zambia	ERR1878581	Weill et al. Science 2017
CNRVC070530	2007	Democratic Republic of the Congo	ERR1878564	Weill et al. Science 2017
L283	2008	Democratic Republic of the Congo	ERR572756	Weill et al. Science 2017
L354	2011	Democratic Republic of the Congo	ERR572821	Weill et al. Science 2017
CNRVC140013	2014	Democratic Republic of the Congo	ERR1878608	Weill et al. Science 2017
L372	2013	Democratic Republic of the Congo	ERR572563	Weill et al. Science 2017
CNRVC140012	2014	Democratic Republic of the Congo	ERR1878607	Weill et al. Science 2017
L268	2012	Zambia	ERR386661	Weill et al. Science 2017
L254	2012	Zambia	ERR386663	Weill et al. Science 2017
L273	2012	Zambia	ERR386656	Weill et al. Science 2017
L1	2009	Democratic Republic of the Congo	ERR572514	Weill et al. Science 2017
726	2009	Democratic Republic of the Congo	ERR386698	Weill et al. Science 2017
622	2009	Democratic Republic of the Congo	ERR386629	Weill et al. Science 2017
L339	2012	Democratic Republic of the Congo	ERR572807	Weill et al. Science 2017
L300	2011	Democratic Republic of the Congo	ERR572772	Weill et al. Science 2017
L384	2013	Democratic Republic of the Congo	ERR572837	Weill et al. Science 2017
CNRVC110272	2011	Central African Republic	ERR1878603	Weill et al. Science 2017
CNRVC110266	2011	Central African Republic	ERR1878602	Weill et al. Science 2017
L184	2012	Democratic Republic of the Congo	ERR572548	Weill et al. Science 2017
L193	2012	Democratic Republic of the Congo	ERR386712	Weill et al. Science 2017
L174	2012	Democratic Republic of the Congo	ERR386688	Weill et al. Science 2017
L310	2011	Democratic Republic of the Congo	ERR572781	Weill et al. Science 2017
L204	2012	Democratic Republic of the Congo	ERR386711	Weill et al. Science 2017

L201	2012	Democratic Republic of the Congo	ERR386647	Weill et al. Science 2017
L198	2012	Democratic Republic of the Congo	ERR386695	Weill et al. Science 2017
CNRVC980080	1998	Tanzania	ERR976563	Weill et al. Science 2017
CNRVC980081	1998	Tanzania	ERR976564	Weill et al. Science 2017
CNRVC980029	1998	Comoros	ERR976558	Weill et al. Science 2017
CNRVC980026	1998	Comoros	ERR976557	Weill et al. Science 2017
CNRVC980023	1998	Comoros	ERR976556	Weill et al. Science 2017
CNRVC000065	2000	Madagascar	ERR976596	Weill et al. Science 2017
CNRVC000064	2000	Madagascar	ERR976595	Weill et al. Science 2017
CNRVC010051	2000	Madagascar	ERR1877939	Weill et al. Science 2017
CNRVC010055	2001	Madagascar	ERR1877940	Weill et al. Science 2017
CNRVC010008	2001	Comoros	ERR1877644	Weill et al. Science 2017
CNRVC000085	2000	Comoros	ERR1877640	Weill et al. Science 2017
CNRVC010045	2001	Comoros	ERR1877648	Weill et al. Science 2017
CNRVC000055	1999	Madagascar	ERR976589	Weill et al. Science 2017
CNRVC000056	1999	Madagascar	ERR976590	Weill et al. Science 2017
CNRVC990078	1999	Madagascar	ERR976588	Weill et al. Science 2017
CNRVC000059	2000	Madagascar	ERR976592	Weill et al. Science 2017
CNRVC000058	2000	Madagascar	ERR976591	Weill et al. Science 2017
CNRVC000062	2000	Madagascar	ERR976594	Weill et al. Science 2017
CNRVC000060	2000	Madagascar	ERR976593	Weill et al. Science 2017
CNRVC980384	1998	Sudan	ERR976575	Weill et al. Science 2017
CNRVC980356	1998	Sudan	ERR976571	Weill et al. Science 2017
CNRVC990015	1999	Uganda	ERR976584	Weill et al. Science 2017
CNRVC000043	2000	Uganda	ERR1877638	Weill et al. Science 2017
CNRVC000044	2000	Uganda	ERR1877639	Weill et al. Science 2017
CNRVC980005	1998	Uganda	ERR976553	Weill et al. Science 2017
CNRVC980004	1998	Uganda	ERR976552	Weill et al. Science 2017
CNRVC980194	1998	Rwanda	ERR976566	Weill et al. Science 2017
CNRVC980195	1998	Rwanda	ERR976567	Weill et al. Science 2017
CNRVC000209	2000	Rwanda	ERR1877641	Weill et al. Science 2017
CNRVC000212	2000	Rwanda	ERR1877642	Weill et al. Science 2017
CNRVC030469	2003	Democratic Republic of the Congo	ERR1878097	Weill et al. Science 2017
CNRVC030032	2003	Democratic Republic of the Congo	ERR1878090	Weill et al. Science 2017
CNRVC050077	2005	Democratic Republic of the Congo	ERR1878132	Weill et al. Science 2017
CNRVC040299	2004	Democratic Republic of the Congo	ERR1878116	Weill et al. Science 2017
CNRVC060120	2006	Kenya	ERR1878154	Weill et al. Science 2017
CNRVC070020	2007	Djibouti	ERR1878551	Weill et al. Science 2017

CNRVC060119	2006	Kenya	ERR1878153	Weill et al. Science 2017
CNRVC070067	2007	South Sudan	ERR1878554	Weill et al. Science 2017
CNRVC070066	2007	South Sudan	ERR1878553	Weill et al. Science 2017
CNRVC960215	1996	India	ERR1879597	Weill et al. Science 2017
THSTI_AM232	1996	India	ERR1880800	Weill et al. Science 2017
CNRVC990299	1999	Afghanistan	ERR1879649	Weill et al. Science 2017
CNRVC990298	1999	Afghanistan	ERR1879648	Weill et al. Science 2017
THSTI_C18932	1997	India	ERR1880802	Weill et al. Science 2017
CNRVC970077	1997	India	ERR1879637	Weill et al. Science 2017
THSTI_E12067	1999	India	ERR1880813	Weill et al. Science 2017
THSTI_CRC155	2000	India	ERR1880809	Weill et al. Science 2017
THSTI_H11801	2002	India	ERR1880817	Weill et al. Science 2017
THSTI_CRC198	2000	India	ERR1880810	Weill et al. Science 2017
THSTI_RC12	2001	India	ERR1880836	Weill et al. Science 2017
THSTI_I17260	2003	India	ERR1880820	Weill et al. Science 2017
THSTI_J4770	2004	India	ERR1880830	Weill et al. Science 2017
THSTI_J16173	2004	India	ERR1880829	Weill et al. Science 2017
THSTI_IDH0002	2007	India	ERR1880821	Weill et al. Science 2017
THSTI_IDH00136	2007	India	ERR1880822	Weill et al. Science 2017
CNRVC080397	2008	India	ERR1878570	Weill et al. Science 2017
THSTI_IDH02367	2009	India	ERR1880826	Weill et al. Science 2017
THSTI_IDH00563	2008	India	ERR1880823	Weill et al. Science 2017
THSTI_CO908	1995	India	ERR1880808	Weill et al. Science 2017
THSTI_CO1089	1995	India	ERR1880803	Weill et al. Science 2017
THSTI_NLC8	1999	India	ERR1880835	Weill et al. Science 2017
THSTI_G27875	2001	India	ERR1880814	Weill et al. Science 2017
THSTI_I16615	2003	India	ERR1880819	Weill et al. Science 2017
THSTI_H12381	2002	India	ERR1880818	Weill et al. Science 2017
THSTI_AM120	1996	India	ERR1880799	Weill et al. Science 2017
THSTI_CO783	1994	India	ERR1880807	Weill et al. Science 2017
THSTI_CO553	1994	India	ERR1880806	Weill et al. Science 2017
THSTI_D16133	1998	India	ERR1880811	Weill et al. Science 2017
THSTI_VC4	1992	India	ERR1880843	Weill et al. Science 2017
THSTI_K12759	2005	India	ERR1880831	Weill et al. Science 2017
CNRVC050280	2005	Pakistan	ERR1878135	Weill et al. Science 2017
CNRVC090123	2009	Pakistan	ERR1878575	Weill et al. Science 2017
CNRVC090143	2009	Pakistan	ERR1878576	Weill et al. Science 2017
CNRVC090144	2009	Pakistan	ERR1878577	Weill et al. Science 2017

Zim_12	2009	Zimbabwe	ERR044798	Weill et al. Science 2017
THSTI_L9496	2006	India	ERR1880834	Weill et al. Science 2017
CNRVC060089	2006	India	ERR1878151	Weill et al. Science 2017
THSTI_K9398	2005	India	ERR1880832	Weill et al. Science 2017
THSTI_L19089	2006	India	ERR1880833	Weill et al. Science 2017
CNRVC060333	2006	India/Nepal	ERR1878548	Weill et al. Science 2017
THSTI_IDH01405	2009	India	ERR1880825	Weill et al. Science 2017
THSTI_IDH01272	2008	India	ERR1880824	Weill et al. Science 2017
THSTI_IDH02959	2010	India	ERR1880828	Weill et al. Science 2017
THSTI_IDH02834	2010	India	ERR1880827	Weill et al. Science 2017
CNRVC100278	2010	Haiti	ERR1878592	Weill et al. Science 2017
CNRVC090175	2009	Nigeria	ERR1878578	Weill et al. Science 2017
CNRVC090182	2009	Cameroon	ERR1878580	Weill et al. Science 2017
CNRVC090177	2009	Nigeria	ERR1878579	Weill et al. Science 2017
CNRVC140160	2010	Niger	ERR1878611	Weill et al. Science 2017
CNRVC100224	2010	Nigeria	ERR1878589	Weill et al. Science 2017
CNRVC100159	2010	Nigeria	ERR1878583	Weill et al. Science 2017
CNRVC110128	2010	Cameroon	ERR1878598	Weill et al. Science 2017
CNRVC140167	2010	Niger	ERR1878612	Weill et al. Science 2017
CNRVC100186	2010	Cameroon	ERR1878588	Weill et al. Science 2017
CNRVC100240	2010	Chad	ERR1878590	Weill et al. Science 2017
CNRVC100246	2010	Chad	ERR1878591	Weill et al. Science 2017
CNRVC110241	2011	Chad	ERR1878600	Weill et al. Science 2017
CNRVC110230	2011	Chad	ERR1878599	Weill et al. Science 2017
L410	2012	Togo	ERR572590	Weill et al. Science 2017
L397	2010	Togo	ERR572580	Weill et al. Science 2017
L395	2010	Togo	ERR572839	Weill et al. Science 2017
L403	2011	Togo	ERR572585	Weill et al. Science 2017
L413	2012	Togo	ERR572592	Weill et al. Science 2017
L408	2011	Togo	ERR572589	Weill et al. Science 2017
L409	2012	Togo	ERR572842	Weill et al. Science 2017
CNRVC110096	2010	Cameroon	ERR1878595	Weill et al. Science 2017
CNRVC110113	2011	Cameroon	ERR1878596	Weill et al. Science 2017
CNRVC110120	2011	Cameroon	ERR1878597	Weill et al. Science 2017
CNRVC110058	2011	Nigeria	ERR1878593	Weill et al. Science 2017
CNRVC110060	2011	Nigeria	ERR1878594	Weill et al. Science 2017
CNRVC110262	2011	Nigeria	ERR1878601	Weill et al. Science 2017
CNRVC140027	2014	Nigeria	ERR1878609	Weill et al. Science 2017

CNRVC140150	2014	Nigeria	ERR1878610	Weill et al. Science 2017
468_14	2014	Ghana	ERR1024524	Weill et al. Science 2017
19_14	2014	Ghana	ERR1024521	Weill et al. Science 2017
262_14	2014	Ghana	ERR1024526	Weill et al. Science 2017