

**Table S1.**

**The 160 strains *A. actinomycetemcomitans* strains used in the present work.** In total, 32 JP2 strains (1-32), 41 Ghanaian (Gh) (33-73), and 47 Swedish (Sw) serotype b strains, including strain J33 (74-120). In addition, 10 serotype a, and 10 serotype c strains from both Ghana and Sweden (120-160).

Cau, Caucasian descent, af, African descent

Serial number	Strain number used in this study	Isolate number in strain collections	Origin of strains
1	J 1	HK 921	USA
2	J 2	HK 1651	Gh
3	J 3	HK 1519	Cape Verde
4	J 4	HK 1702	Brazil
5	J 5	HK 909	unknown
6	J 6	KLA1-08	Sw - cau
7	J 7	BLA1-08	Sw - cau
8	J 8	520-01	Sw - cau
9	J 9	246 A-04	Sw- af
10	J 10	G24	Gh
11	J 11	G36	Gh
12	J 12	LA 640	USA
13	J 13	LA 806	USA
14	J 14	090-10	Sw - cau
15	J 15	196A1-10	Sw - cau
16	J 16	437 G	Gh
17	J 17	488 G	Gh
18	J 18	524 G	Gh
19	J 19	654 G	Gh
20	J 20	666 G	Gh
21	J 21	3364 CV	Cape Verde
22	J 22	115A-11	Sw - cau
23	J 23	352B-11	Sw - cau
24	J 24	855G-11	Gh

25	J 25	841G-11	Gh
26	J 26	809G-11	Gh
27	J 27	245-11	Sw - cau
28	J 28	P48	Cape Verde
29	J 29	557 A-12	Sw-af
30	J 30	338 A-13	Sw - cau
31	J 31	342 A-13	Sw-af
32	J 32	408 A-13	Sw-af
33	001 Ghb	062 A	Gh
34	028 Ghb	197 A	Gh
35	065 Ghb	283 A	Gh
36	071 Ghb	286 A	Gh
37	153 Ghb	394 A	Gh
38	205 Ghb	367 A	Gh
39	212 Ghb	448 A	Gh
40	217 Ghb	457 A	Gh
41	234 Ghb	035 A	Gh
42	369 Ghb	180 A	Gh
43	370 Ghb	182 C	Gh
44	443 Ghb	001 A	Gh
45	467 Ghb	063 A	Gh
46	470 Ghb	067 A	Gh
47	486 Ghb	083 A	Gh
48	490 Ghb	096 A	Gh
49	492 Ghb	100 A	Gh
50	493 Ghb	136 A	Gh
51	519 Ghb	158 A	Gh
52	540 Ghb	186 A	Gh
53	575 Ghb	204 B	Gh
54	581 Ghb	208 A	Gh
55	585 Ghb	220 A	Gh
56	589 Ghb	284 A	Gh
57	605 Ghb	299 A	Gh

58	619 Ghb	372 A	Gh
59	621 Ghb	374 A	Gh
60	624 Ghb	376 A	Gh
61	633 Ghb	392 A	Gh
62	638 Ghb	222 A	Gh
63	640 Ghb	223 A	Gh
64	652 Ghb	412 A	Gh
65	662 Ghb	432 A	Gh
66	670 Ghb	423 A	Gh
67	683 Ghb	492 A	Gh
68	702 Ghb	439 A	Gh
69	708 Ghb	221 A	Gh
70	716 Ghb	448 A	Gh
71	727 Ghb	169 A	Gh
72	744 Ghb	326 A	Gh
73	769 Ghb	485 A	Gh
74	11 Ub	908-2000	Sw
75	12 Ub	612-2002	Sw
76	14 Ub	114-2005	Sw
77	27 Ub	699-2000	Sw
78	40 Ub	547-2004	Sw
79	54 Ub	760-2003	Sw
80	66 Ub	762-2002	Sw
81	78 Ub	496-2002	Sw
82	107 Ub	731-2002	Sw
83	112 Ub	704-2001	Sw
84	119 Ub	96-2000	Sw
85	128 Ub	132-2002	Sw
86	135 Ub	780-2003	Sw
87	137 Ub	700-2001	Sw
88	139 Ub	179-2001	Sw
89	145 Ub	96-2005	Sw
90	146 Ub	54-2006	Sw

91	147 Ub	235-2006	Sw
92	148 Ub	70-2008	Sw
93	153 Ub	746-2002	Sw
94	160 Ub	700-2002	Sw
95	167 Ub	287-2009	Sw
96	172 Ub	380-2009	Sw
97	177 Ub	582-2009	Sw
98	184 Ub	17-2010	Sw
99	185 Ub	38-2010	Sw
100	189 Ub	135-2010	Sw
101	195 Ub	214-2010	Sw
102	196 Ub	248-2010	Sw
103	197 Ub	249-2010	Sw
104	200 Ub	364-2010	Sw
105	201 Ub	490-2010	Sw
106	208 Ub	73-2011	Sw
107	219 Ub	349-2011	Sw
108	231 Ub	576-2011	Sw
109	234 Ub	629-2011	Sw
110	240 Ub	71-2012	Sw
111	244 Ub	115-2012	Sw
112	251 Ub	298-2012	Sw
113	255 Ub	499-2012	Sw
114	260 Ub	542-2012	Sw
115	266 Ub	576-2012	Sw
116	279 Ub	508-2007	Sw
117	281 Ub	233-2004	Sw
118	282 Ub	77-2002	Sw
119	290 Ub	336-2008	Sw
120	J 33	456 A-13	Sw
121	14 Gha	187 A	Gh
122	35 Gha	208 A	Gh
123	61 Gha	272 A	Gh

124	63 Gha	278 A	Gh
125	79 Gha	295 A	Gh
126	88 Gha	300 A	Gh
127	117 Gha	358 A	Gh
128	123 Gha	365 A	Gh
129	131 Gha	368 B	Gh
130	135 Gha	372 B	Gh
131	3 Ghc	128 A	Gh
132	16 Ghc	187 B	Gh
133	27 Ghc	195 A	Gh
134	75 Ghc	292 A	Gh
135	86 Ghc	299 B	Gh
136	92 Ghc	304 A	Gh
137	98 Ghc	323 A	Gh
138	109 Ghc	347 A	Gh
139	121 Ghc	363 B	Gh
140	129 Ghc	368 A	Gh
141	1 Uc	686-2001	Sw
142	3 Uc	553-2002	Sw
143	4 Uc	483-2003	Sw
144	5 Uc	28-2012	Sw
145	9 Uc	544-2005	Sw
146	16 Uc	375-2002	Sw
147	17 Uc	35-2004	Sw
148	22 Uc	276-2004	Sw
149	24 Uc	37-2003	Sw
150	31 Uc	141-2002	Sw
151	7 Ua	522-2005	Sw
152	8 Ua	22-2004	Sw
153	13 Ua	178-2001	Sw
154	18 Ua	400-2005	Sw

155	19 Ua	648-2001	Sw
156	21 Ua	371-2005	Sw
157	26 Ua	182-2007	Sw
158	28 Ua	650-2003	Sw
159	30 Ua	659-2001	Sw
160	33 Ua	549-2003	Sw

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**Table S2. Comparison of MIC values for *A. actinomycetemcomitans* from different studies.**

MIC data given as two-fold dilutions

Antimicrobial agent	MIC range	MIC <sub>50</sub>	MIC <sub>90</sub>	Number of strains, [reference]
<b>Amoxicillin</b>	0.125-2.0	0.5	1	73, [25]
	0.064-16	0.5	1	40 [27]
	0.25-2	1	2	24 [23]
	0.064-8	0.25	2	50 [22]
	0.25-2	0.25	2	257 [28]
	0.25-2	0.5	1	160 [present]
<b>Benzylpenicillin</b>	0.5-8	2	4	73 [25]
	0.125-8	2	8	50 [22]
	0.125-8	1	4	160 [present]
<b>Azithromycin</b>	0.064-2	1	1	73 [25]
	<0.064->32	0.5	32	24 [23]
	0.125-64	4	16	40 [27]
	0.125 - 4	2	4	45 [24]
	0.064 - 4	0.5	1	160 [present]
<b>Cefotaxime</b>	0.5-8	0.5	2	40 [27]
	<0.016 - 0.25	0.064	0.064	160 [present]
<b>Tetracycline</b>	0.25-4	0.5	1	52 [25]*
	0.25-1	1	1	21 [25]
	0.032-16	0.25	0.5	50 [22]
	0.125-16	2	8	40 [27]
	<0.125 -1	0.5	1	160 [present]
<b>Quinolones</b>				
Moxifloxacin	0.064-4	0.125	0.5	40 [27]
	0.0064-0.032	0.0023	0.032	45 [24]
Trovafloxacin	≤0.64-0.12	≤0.064	≤0.064	73 [25]
Ciprofloxacin	0.01-0.08	0.03	0.04	50 [22]
	<0.002-0.006	0.03	0.006	45 [24]
Levofloxacin	<0.002 - 0.16	0.004	0.008	160 [present]
<b>Metronidazole</b>	64->256	>256	>256	40 [27]
	0.25->64	24	>64	24 [23]
	32->512	64	128	50 [22]
	0.25-128	16	16	73 [25]
	2- >256	8	>256	45 [24]
	0.5 - >256	4	128	160 [present]

\* Non-oral strains

**Table S3. The relationship between MIC values for benzylpenicillin (BP) and metronidazole in 160 strains of *Aggregatibacter actinomycetemcomitans*.**

MIC BP (mg/L)	MIC metronidazole (mg/L)								
	1	2	4	8	16	32	64	128	≥256
8		1		1	1	3	2	2	1
4	1	1	3	7	5				4
2	2	6	12	12	7	4	3	1	2
1		2	8	5	5	5	1	1	3
0.5		1	1	2	5	1	1		
0.25	2	5	9	3	4	2			
0.125	1	6	4						

The number of strains with respective MIC values is shown in the table.