

Table S1. *P. aeruginosa* strains list.

Original Name	Location	Country	Year (2)	Source	fAFLP	Serotype	<i>oprD</i>	<i>oprL</i>	<i>oprI</i>	<i>exoS/U</i>	<i>TfpO</i>	<i>fpvA</i>	<i>fpvB</i>	Genes mediating ABR	ABR group
PER08	Ghent	Belgium	1992	Wound	32	11	C202	B12	B1	<i>exoS</i>	NA	I	POS	PER-1/2, ANT(2")	3
Bu002	Budapest	Hungary	1997	Wound	24	11	B107	B12	B1	<i>exoS</i>	<i>TfpO_b</i>	II b	POS	ANT(3")-Ia	4
9AR3	De Haan	Belgium	1993	CF-patient		NT	B110	B07	B1	<i>exoS</i>	<i>TfpO_b</i>	III	POS	NA	2
PHLS08959 (Liverpool)	Liverpool	UK	2003	CF-patient	20	NT	B108	B02	B1	<i>exoS</i>	<i>TfpO_b</i>	III	POS	NA	3
MC161	Leuven	Belgium	2003	CF-patient	20	NT	B101	B12	B1	<i>exoS</i>	<i>TfpO_b</i>	III	POS	NA	TRM
PHLS08916 (Midlands I)	Birmingham	UK	2003	CF-patient	20	NT	B107	B12	B1	<i>exoS</i>	<i>TfpO_b</i>	III	POS	NA	4
13BR3	De Haan	Belgium	1993	CF-patient		NT	B115	B02	A1	<i>exoS</i>	NA	III	POS	NA	2
Li010	Lisbon	Portugal	1997	CF-patient		NT	B104 (DOM6)	A07	B1	<i>exoS</i>	<i>TfpO_b</i>	III	POS	NA	5
So095	Sofia	Bulgaria	1997	Burn		NT	C106	B12	B1	<i>exoS</i>	NA	III	POS	NA	0
Bo546	Boston	USA	1992	Burn		12	B114	B15	E1	<i>exoS</i>	NA	I	POS	GES-1/2, TEM-like, AAC(3)-IIa	3
O12-20	Roehampton	UK	1987	Clinical non CF		12	C103	B11	A1	<i>exoS</i>	<i>TfpO_b</i>	I	POS	ANT(3")-Ia	1
So098	Sofia	Bulgaria	1997	Wound	37	12	A111	B08	B1	<i>exoS</i>	<i>TfpO_b</i>	III	POS	PSE, AAC(6')-Ib	
O12-17	Pordenone	Italy	1988	Clinical non CF	37	12	A111	B08	B1	<i>exoS</i>	<i>TfpO_b</i>	III	POS	PSE, AAC(6')-Ib	
Co7388	Cali	Colombia	1999	Urine	37	12	A111	B08	B1	<i>exoS</i>	<i>TfpO_b</i>	III	POS	VIM-2-like	
Co380791	Cali	Colombia	2003	Blood	37	12	A111	B08	B1	<i>exoS</i>	<i>TfpO_b</i>	III	POS	VIM-2-like, AAC(6')-Ib	
1709-12	Leuven	Belgium	2004	Clinical non CF	37	12	A111 (DOM20)	B08	B1	<i>exoS</i>	<i>TfpO_b</i>	III	POS	PSE, AAC(6')-Ib	5
1709-20	Leuven	Belgium	2004	Clinical non CF	37	12	A111 (DOM20)	B08	B1	<i>exoS</i>	<i>TfpO_b</i>	III	POS	PSE, AAC(6')-Ib	5
MC110	Brussels	Belgium	2003	CF-patient	20	NT	B101	B02	A1	<i>exoS</i>	<i>TfpO_b</i>	I	POS	NA	2
CPHL 10701	Surrey	UK	1967	Sputum	20	NT	B107	B07	A1	<i>exoS</i>	<i>TfpO_b</i>	I	POS	NA	1
MC361 (blue)	Brussels	Belgium	2003	CF-patient	20	NT	B112	B05	B1	<i>exoS</i>	<i>TfpO_b</i>	I	POS	NA	2
MC116	Brussels	Belgium	2003	CF-patient	31	NT	B107 (DOM17)	B12	B1	<i>exoS</i>	<i>TfpO_b</i>	I	POS	NA	2
MC305	Ghent	Belgium	2003	CF-patient	31	NT	B101	B02	A1	<i>exoS</i>	<i>TfpO_b</i>	I	POS	NA	1

Clone M	Hanover	Germany	1994	CF-patient	20	NT	B106 (DOM15)	B12	B1	<i>exoS</i>	<i>TfpO_b</i>	I	POS	NA	1
LiA11/2004	Almada	Portugal	2004	Cat nose	36	9	B101	B02	A1	<i>exoS</i>	<i>TfpO_b</i>	I	POS	NA	2
CPHL 2000	London	UK	1923	Wound	30	9	B113	B05	A1	<i>exoS</i>	<i>TfpO_b</i>	I	POS	NA	0
CPHL 1999	London	UK	1924	Ear	30	NT	C103	B11	A1	<i>exoS</i>	NA	I	POS	NA	0
TA21	Hobart	Australia	2004	Sputum	20	NT	C108	B02	A1	<i>exoS</i>	NA	I	POS	NA	2
PN1352(65)w	Panama City	Panama	2006	Nose	20	NT	C103	B11	A1	<i>exoS</i>	NA	I	POS	NA	1
NCF013	Hobart	Australia	2003	Lung carcinoma	20	NT	C103	B11	A1	<i>exoS</i>	NA	I	POS	NA	1
NCF015	Hobart	Australia	2003	COPD	20	NT	C106	B12	A1	<i>exoS</i>	NA	I	POS	NA	1
TA28	Hobart	Australia	2004	Wound	20	NT	C109	B12	B1	<i>exoS</i>	NA	I	POS	NA	2
MC178 (LCV)	Brussels	Belgium	2003	CF-patient	34	NT	B107	B11	A1	<i>exoS</i>	NA	I	POS	NA	1
MC178 (SCV)	Brussels	Belgium	2003	CF-patient	34	NT	B107	B11	A1	<i>exoS</i>	NA	I	POS	NA	TRM
C2 (clone C)	Hannover	Germany	1988	CF-patient	28	1/13	B106	B02	B1	<i>exoS</i>	NA	II b	POS	NA	2
PA7	Buenos Aires	Argentina	pre 1984	Wound		12	A204	E03	F1	NA	NA	II b	NA	NA	4
SIS3740 (O12)	Athens	Greece	1994	Sputum	38	12	A111	B08	B1	<i>exoS</i>	<i>TfpO_b</i>	III	POS	PSE, AAC(6')-Ib	4
PER05	Ghent	Belgium	1999	Sputum	38	12	A111	B08	B1	<i>exoS</i>	<i>TfpO_b</i>	III	POS	PER-1/2	2
Br667 (AFLP 35)	Brussels	Belgium	1998	Burn	33	12	A111	B08	B1	<i>exoS</i>	<i>TfpO_b</i>	III	POS	PSE, AAC(6')-Ib	4
Br993	Brussels	Belgium	1999	Sputum	33	12	A111 (DOM13)	B08	B1	<i>exoS</i>	<i>TfpO_b</i>	III	POS	PSE, AAC(6')-Ib	5
Lo049	London	UK	1996	Burn	33	12	A111	B08	B1	<i>exoS</i>	<i>TfpO_b</i>	III	POS	PSE, AAC(6')-Ib	4
KAT3529 (O12)	Athens	Greece	1994	Wound	39	12	A111 (DOM16)	B08	B1	<i>exoS</i>	<i>TfpO_b</i>	III	POS	AAC(6')-Ib	4
Is586(13T)	Istanbul	Turkey	1997	Burn	39	12	A111	B08	B1	<i>exoS</i>	<i>TfpO_b</i>	III	POS	PSE, AAC(6')-Ib	4
A10	Paris	France	1882-1918	Wound	28	1	B103	B12	B1	<i>exoS</i>	<i>TfpO_b</i>	I	POS	NA	0
10BR1	De Haan	Belgium	1993	CF-patient	14	1	B107	B12	B1	<i>exoS</i>	NA	I	POS	NA	2
Aa249	Aachen	Germany	1997	Burn	30	NT	B107 (DOM7)	B12	B1	<i>exoS</i>	<i>TfpO_b</i>	I	POS	AAC(6')-Ib	5
Bu004	Budapest	Hungary	1997	Throat	32	NT	C106	B12	A1	<i>exoS</i>	NA	I	POS	NA	1
Bo548	Boston	USA	1992	Burn		NT	C107 (DOM12)	B12	A1	<i>exoS</i>	NA	I	POS	NA	2
So099	Sofia	Bulgaria	1997	Burn		NT	C104	B01	A1	<i>exoS</i>	NA	I	POS	AAC(6')-Ib	4

NCF017	Hobart	Australia	2003	Sputum	43	NT	C103	B12	B1	<i>exoS</i>	<i>TfpO_b</i>	I	POS	NA	1
Is579	Istanbul	Turkey	1997	Burn	30	8	B112	B02	B1	<i>exoS</i>	NA	IIa**	POS	NA	3
PHLS08960 (Manchester)	Manchester	UK	2003	CF-patient	7	NT	B107 (DOM14)	B02	A1	<i>exoS</i>	<i>TfpO_b</i>	II b	POS	NA	4
TA03	Hobart	Australia	2004	Wound	20	NT	A113	B02	B1	<i>exoS</i>	NA	II b	POS	NA	1
A20	Paris	France	1882- 1918	Wound	28	NT	B101	B12	B1	<i>exoS</i>	<i>TfpO_b</i>	II b	POS	NA	0
Lw1047	Lwiro	Congo	2001	Blood	30	NT	B107	B02	A1	<i>exoS</i>	<i>TfpO_b</i>	II b	POS	ANT(3")-Ia	4
MC084	Antwerp	Belgium	2003	CF-patient	20	NT	B106	B02	B1	<i>exoS</i>	NA	II b	POS	NA	1
MC039	Ghent	Belgium	2003	CF-patient	20	NT	B107 (DOM18)	B12	B1	<i>exoS</i>	NA	II b	POS	NA	5
MC093	Leuven	Belgium	2003	CF-patient	21	NT	B106	B02	B1	<i>exoS</i>	NA	II b	POS	NA	2
MC325	Ghent	Belgium	2003	CF-patient	21	NT	B106 (DOM19)	B02	B1	<i>exoS</i>	NA	II b	POS	NA	4
MC075	Antwerp	Belgium	2003	CF-patient	21	NT	B106	B02	B1	<i>exoS</i>	<i>TfpO_b</i>	II b	POS	NA	1
MC142	Brussels	Belgium	2003	CF-patient	20	NT	B110	B01	B1	<i>exoS</i>	<i>TfpO_b</i>	II b	POS	NA	3
MC099	Ghent	Belgium	2003	CF-patient	20	NT	B101	B02	B1	<i>exoS</i>	<i>TfpO_b</i>	II b	POS	NA	3
MC299	Brussels	Belgium	2003	CF-patient	21	1	B106	B02	B1	<i>exoS</i>	NA	II b	POS	NA	1
C13 (clone C)	Hannover	Germany	1985	CF-patient	28	1	B106	B02	B1	<i>exoS</i>	NA	II b	POS	NA	0
U018A (CF type 4)	Hobart	Australia	2003	CF-patient	20	1	B110	B12	B1	<i>exoS</i>	<i>TfpO_b</i>	II b	POS	NA	1
C1 (clone C)	Hannover	Germany	1987	CF-patient	28	1/13	B106	B02	B1	<i>exoS</i>	NA	II b	POS	NA	2
U003A (CF type 4)	Hobart	Australia	2003	CF-patient	43	1	B110	B12	B1	<i>exoS</i>	<i>TfpO_b</i>	II b	POS	NA	4
TA08	Hobart	Australia	2003	Sputum	20	3	B107	B12	B1	<i>exoS</i>	NA	II b	POS	NA	1
So103	Sofia	Bulgaria	1997	Wound	9	11	C202	B02	B1	<i>exoU</i>	NA	II b	POS	OXA-group I, AAC(6')-Ib	3
Aa245	Aachen	Germany	1997	Burn	11	11	C202 (DOM3)	B02	B1	<i>exoU</i>	NA	II b	POS	GES-1/2, TEM- like, AAC(6')- Ib	5
TA34	Hobart	Australia	2004	Urine	22	NT	B107	B07	A1	<i>exoS</i>	NA	II b	POS	NA	2
A11	Paris	France	1882- 1918	Wound	28	NT	B101	B12	B1	<i>exoS</i>	<i>TfpO_b</i>	II b	POS	NA	0
A16	Paris	France	1882- 1918	Wound	28	NT	B101	B12	B1	<i>exoS</i>	<i>TfpO_b</i>	II b	POS	NA	0
A13	Paris	France	1882- 1918	Wound	28	NT	B101	B12	B1	<i>exoS</i>	<i>TfpO_b</i>	II b	POS	NA	0
PhDW6	Tacloban City	The Philippines	1993	Wound		NT	B101	B13	A1	<i>exoS</i>	<i>TfpO_b</i>	II b	POS	NA	2

A22	Paris	France	1882-1918	Wound	20	6	B107	B12	B1	<i>exoS</i>	<i>TfpO_b</i>	II b	POS	NA	1
Br670	Brussels	Belgium	1998	Sputum	30	6	B107 (DOM8)	B07	B1	<i>exoS</i>	<i>TfpO_b</i>	II b	POS	SHV	3
Br776	Brussels	Belgium	1998	Throat		6	B110	B12	B1	<i>exoS</i>	<i>TfpO_b</i>	II b	POS	NA	4
CPHL 6749	Elstree	UK	1944	Urine	20	6	C103	B12	B1	<i>exoS</i>	<i>TfpO_b</i>	I	POS	NA	1
AES1	Australia	Australia	1999	CF-patient		6	B119	B02	A1	<i>exoS</i>	<i>TfpO_b</i>	III	POS	NA	1
M-184	Bucarest	Romania	1965-1978	Faeces	7	1/3/10/13	B107	B02	A1	<i>exoS</i>	NA	II a	POS	NA	1
Is580	Istanbul	Turkey	1997	Burn	30	3	B108	B03	B1	<i>exoS</i>	NA	II a	POS	NA	4
M-280	Bucarest	Romania	1965-1978	Faeces	7	3	B107	B02	A1	<i>exoS</i>	NA	II a	POS	NA	1
M-79	Bucarest	Romania	1965-1978	Urine	7	NT	B107	B02	A1	<i>exoS</i>	<i>TfpO_b</i>	II a	POS	NA	1
5BR2	De Haan	Belgium	1993	CF-patient	20	NT	C109	B07	B1	<i>exoS</i>	NA	II a	POS	NA	2
C5311 (RAPD A097)	Vancouver	Canada	2002	CF-patient	20	NT	B107	B13	B1	<i>exoS</i>	<i>TfpO_b</i>	II a	POS	NA	3
TA04	Hobart	Australia	2003	Foot ulcer	20	NT	B107	B07	A1	<i>exoS</i>	<i>TfpO_b</i>	II a	POS	NA	1
MC096	Leuven	Belgium	2003	CF-patient	20	NT	B106	B12	B1	<i>exoS</i>	<i>TfpO_b</i>	II a	POS	NA	0
MC361 (green)	Brussels	Belgium	2003	CF-patient	20	NT	B107	B02	B1	<i>exoS</i>	NA	II a	POS	NA	1
C3128 (RAPD A002)	Vancouver	Canada	2002	CF-patient	21	NT	B106	B02	B1	<i>exoS</i>	NA	II a	POS	NA	2
Br735 (AFLP 8)	Brussels	Belgium	1998	Burn		NT	C204	A05	B1	<i>exoS</i>	NA	II a	POS	PSE	1
Br680	Brussels	Belgium	1998	Burn		12	A201	E01	F1	<i>exoS</i>	<i>TfpO_b</i>	II b	NA	NA	0
AGO4092 (O11)	Athens	Greece	1994	Urine	12	11	C202	B02	B1	<i>exoU</i>	NA	II b	POS	SHV, ANT(3'')-Ia, AAC(6')-Ib	
PN1296(62)	Panama City	Panama	2006	Wound		11	C202 (DOM21)	B02	B1	<i>exoU</i>	NA	II a	POS	TEM-like	5
PAO1	Melbourne	Australia	1955	Wound	30	5	C103	B11	A1	<i>exoS</i>	NA	I	POS	NA	1
A18	Paris	France	1882-1918	Leg ulcer	20	6	B107	B12	C1	<i>exoS</i>	<i>TfpO_b</i>	I	POS	NA	1
MC086	Ghent	Belgium	2003	CF-patient	20	6	C106	B02	B1	<i>exoS</i>	<i>TfpO_b</i>	I	POS	NA	1
TA05	Hobart	Australia	2003	Sputum	26	6	B107	B12	B1	<i>exoS</i>	<i>TfpO_b</i>	I	POS	NA	1
Pr317	Prague	Czech Republic	1996	Burn		11	C202 (DOM10)	B02	B1	<i>exoU</i>	NA	II b	POS	ANT(3'')-Ia, AAC(3)-IIa	
Br678	Brussels	Belgium	1998	Burn		11	C202 (DOM13)	B02	B1	<i>exoS+U</i>	NA	II b**	POS	PER-1/2	5

Us450	San Antonio	USA	1993	Burn	35	11	C103	B02	B1	<i>exoU</i>	<i>TfpO_b</i>	II a	POS	AAC(6')-Ib	1
Us365	San Antonio	USA	1986	Wound	35	11	C202	B02	B1	<i>exoU</i>	NA	II a	POS	AAC(6')-Ib	0
Bo559	Boston	USA	1997	Burn		1	A103	B06	A1	<i>exoU</i>	<i>TfpO_b</i>	I	POS	NA	1

Table S2. *K. pneumoniae* strains list.

#	LMG number	Original Name	Place of origin	Source of isolation	Capsule type	Virulence genes
1	A110050	1711-040762	Erazme Hospital, Brussels	Bone infection	K20	-
2	A110046	025187127-1	PTMC, CHU Nantes, France	Burn infection	N/A	-
3	17d0862(1)	-	UZGent	Burn wound	K24	-
4	A210120	36336	LHUB-ULB	Bone infection	N/A	-
5	A210157	ATCC 13883	UZGent	-	K3	-
6	ATCC 27736	ATCC 27736	LabMCT	-	N/A	-
7	SB4551	SB4551	LabMCT	-	N/A	-
8	S4 4385	S4 4385	LabMCT	-	N/A	-
9	130528/0682	-	LabMCT	Nez	N/A	-
10	121231/0018	-	LabMCT	-	K3	-
11	130306/0842	-	LabMCT	-	K81	-
12	110628/0752	-	LabMCT	-	K14	-
13	121120/0608	-	LabMCT	-	K28	-
14	080708/0488-2	-	LabMCT	-	N/A	-
15	21209/0028	-	LabMCT	-	N/A	-
16	110607/1254	-	LabMCT	-	N/A	-
17	A310226	2101260700 _original	LabMCT	Peritoneal fluid	N/A	-
18	A310229	121114/0502	VUB, Zizi	Peritoneal fluid	N/A	-
19	A310240	1D	HUDERF, Brussels	Peritoneal fluid	N/A	-
20	A310241	2D	HUDERF, Brussels	Peritoneal fluid	N/A	-
21	A310242	1C	HUDERF, Brussels	Peritoneal fluid	N/A	-
22	A310243	2C	HUDERF, Brussels	Peritoneal fluid	N/A	-
23	A310244	2103230964	HUDERF, Brussels	Peritoneal fluid	N/A	-
24	A310245	2103230968	HUDERF, Brussels	Peritoneal fluid	N/A	-
25	A310246	2103230970	HUDERF, Brussels	rectum	N/A	-
26	A310247	2103230966	HUDERF, Brussels	rectum	N/A	-
27	A310270	11819	Saint Luc	rectum	N/A	-
28	A310271	12063	Saint Luc	rectum	N/A	-
29	A310272	12146	Saint Luc	rectum	N/A	-
30	A310273	12307	Saint Luc	rectum	N/A	-
31	A310274	12351	Saint Luc	rectum	N/A	-

32	A310275	12820	Saint Luc	rectum	N/A	-
33	A310276	12894	Saint Luc	rectum	N/A	-
34	A310277	13010	Saint Luc	rectum	N/A	-
35	A310278	13021	Saint Luc	selles	N/A	-
36	A310279	13231	Saint Luc	rectum	N/A	-
37	A310280	13123	Saint Luc	selles	N/A	-
38	A310281	13134	Saint Luc	selles	N/A	-
39	A310282	13196	Saint Luc	rectum	N/A	-
40	A310283	13345	Saint Luc	rectum	N/A	-
41	A310284	13498	Saint Luc	rectum	N/A	-
42	A310285	13571	Saint Luc	rectum	N/A	-
43	A310286	13765	Saint Luc	rectum	N/A	-
44	A310287	14076	Saint Luc	rectum	N/A	-
45	A310288	14094	Saint Luc	rectum	N/A	-
46	A310289	14506	Saint Luc	rectum	N/A	-
47	A310290	14977	Saint Luc	rectum	N/A	-
48	A310291	14987	Saint Luc	rectum	N/A	-
49	A310292	15102	Saint Luc	rectum	N/A	-
50	A310293	CPE199	Saint Luc	rectum	N/A	-
51	A310294	CPE262	Saint Luc	rectum	N/A	-
52	A310295	CPE293	Saint Luc	carriage before surgery		-
53	A310296	CPE357	Saint Luc	-	N/A	-
54	A310360	OPTICS 1 Kp	UCL	-	N/A	-
55	10383	60fe7b3cd37098409a7e71e0	Universitats Klinikum Jena Germany	-	K62	-
56	10384	60fe7b3cd37098409a7e71e3	Universitats Klinikum Jena Germany	-	K62	-
57	10385	60fe7b3cd37098409a7e71e5	Universitats Klinikum Jena Germany	-	K4	-
58	10386	60fe7b3cd37098409a7e71e8	Universitats Klinikum Jena Germany	-	K2	-
59	10387	60fe7b3cd37098409a7e71ed	Universitats Klinikum Jena Germany	-	K62	-
60	10388	60fe7b3cd37098409a7e71ef	Universitats Klinikum Jena Germany	-	KL112	-
61	10389	60fe7b3cd37098409a7e71f0	Universitats Klinikum Jena Germany	-	K4	-
62	10390	60fe7b3cd37098409a7e71f1	Universitats Klinikum Jena Germany	-	K24	-
63	10391	60fe7b3cd37098409a7e71f6	Universitats Klinikum Jena Germany	-	K62	-

64	10392	60fe7b3cd37098409a7e71f8	Universitäts Klinikum Jena Germany	-	K2	-
65	10393	60fe7b3cd37098409a7e71f9	Universitäts Klinikum Jena Germany	-	K62	-
66	10394	60fe7b3cd37098409a7e71fa	Universitäts Klinikum Jena Germany	-	K62	-
67	10395	60fe7b3cd37098409a7e71fc	Universitäts Klinikum Jena Germany	-	K74	-
68	10396	60fe7b3cd37098409a7e7200	Universitäts Klinikum Jena Germany	-	KL112	-
69	10397	60fe7b3cd37098409a7e7205	Universitäts Klinikum Jena Germany	-	K2	-
70	10398	60fe7b3cd37098409a7e7206	Universitäts Klinikum Jena Germany	-	KL112	-
71	10399	60fe7b3cd37098409a7e7207	Universitäts Klinikum Jena Germany	-	KL112	-
72	10400	60fe7b3cd37098409a7e7208	Universitäts Klinikum Jena Germany	-	K74	-
73	10401	60fe7b3cd37098409a7e7209	Universitäts Klinikum Jena Germany	-	K2	-
74	10402	60fe7b3cd37098409a7e721d	Universitäts Klinikum Jena Germany	-	KL107	-
75	10403	60fe7b3cd37098409a7e721e	Universitäts Klinikum Jena Germany	-	K62	-
76	10404	60fe7b3cd37098409a7e7225	Universitäts Klinikum Jena Germany	-	K68	-
77	10405	60fe7b3cd37098409a7e722b	Universitäts Klinikum Jena Germany	-	K38	-
78	10406	60fe7b3cd37098409a7e722e	Universitäts Klinikum Jena Germany	-	KL107	-
79	10407	60fe7b3cd37098409a7e723d	Universitäts Klinikum Jena Germany	-	KL112	-
80	10408	60fe7b3cd37098409a7e71e2	Universitäts Klinikum Jena Germany	-	KL120	-
81	10409	60fe7b3cd37098409a7e7245	Universitäts Klinikum Jena Germany	-	KL102	-
82	10410	60fe82b3d37098409a7e726d	Universitäts Klinikum Jena Germany	-	K24	-
83	10411	60fe82b3d37098409a7e725c	Universitäts Klinikum Jena Germany	-	KL108	-
84	10412	60fe82b3d37098409a7e725b	Universitäts Klinikum Jena Germany	-	K17	-
85	10413	60fe82b3d37098409a7e725a	Universitäts Klinikum Jena Germany	-	KL105	-
86	10414	60fe82b3d37098409a7e7259	Universitäts Klinikum Jena Germany	-	KL108	-

87	10415	60fe82b3d37098409a7e7258	Universitäts Klinikum Jena Germany	-	K17	-
88	10416	60fe82b3d37098409a7e7257	Universitäts Klinikum Jena Germany	-	KL105	-
89	10417	60fe82b3d37098409a7e725e	Universitäts Klinikum Jena Germany	-	K24	-
90	10418	60fe82b3d37098409a7e7250	Universitäts Klinikum Jena Germany	-	K17	-
91	10419	60fe82b3d37098409a7e724f	Universitäts Klinikum Jena Germany	-	KL106	-
92	10420	60fe82b3d37098409a7e7256	Universitäts Klinikum Jena Germany	-	KL105	-
93	10421	60fe82b3d37098409a7e7255	Universitäts Klinikum Jena Germany	-	K64	-
94	10422	60fe82b3d37098409a7e7254	Universitäts Klinikum Jena Germany	-	K2	-
95	10423	60fe82b3d37098409a7e7253	Universitäts Klinikum Jena Germany	-	KL156-D1	-
96	10424	60fe82b3d37098409a7e726e	Universitäts Klinikum Jena Germany	-	K30	-
97	10425	60fe82b3d37098409a7e726c	Universitäts Klinikum Jena Germany	-	K45	-
98	10426	60fe82b3d37098409a7e726b	Universitäts Klinikum Jena Germany	-	KL156-D1	-
99	10427	60fe82b3d37098409a7e726a	Universitäts Klinikum Jena Germany	-	K55	-
100	10428	60fe7b3cd37098409a7e724c	Universitäts Klinikum Jena Germany	-	K5	-
101	10429	60fe7b3cd37098409a7e724d	Universitäts Klinikum Jena Germany	-	K57	-
102	10430	60fe7b3cd37098409a7e724e	Universitäts Klinikum Jena Germany	-	K38	-
103	10431	61375150a181bb3680e24dc3	Universitäts Klinikum Jena Germany	-	K16	-
104	10432	619e0fe79f46174c9eed71e1	Universitäts Klinikum Jena Germany	-	K17	-
105	10433	619e0fe79f46174c9eed71e2	Universitäts Klinikum Jena Germany	-	KL102	-
106	10434	619e0fe79f46174c9eed71e3	Universitäts Klinikum Jena Germany	-	KL107	-
107	10435	619e0fe79f46174c9eed71e4	Universitäts Klinikum Jena Germany	-	KL102	-
108	10436	619e0fe79f46174c9eed71e5	Universitäts Klinikum Jena Germany	-	K24	-
109	10437	619e0fe79f46174c9eed71e6	Universitäts Klinikum Jena Germany	-	K17	-

110	10438	619e0fe79f46174c9eed71e7	Universitäts Klinikum Jena Germany	-	K17	-
111	10439	619e0fe79f46174c9eed71e8	Universitäts Klinikum Jena Germany	-	KL141	-
112	10440	619e0fe79f46174c9eed71ea	Universitäts Klinikum Jena Germany	-	K2	-
113	10441	619e0fe79f46174c9eed71eb	Universitäts Klinikum Jena Germany	-	KL106	-
114	10442	619e0fe79f46174c9eed71ec	Universitäts Klinikum Jena Germany	-	KL156-D1	-
115	106 KPK2	10924	University of Jyväskylä (FIN)	-	N/A	mrK
116	107 KPK3	70165	University of Jyväskylä (FIN)	-	K2	irp, fyu, ybt, kfu, mrk
117	108 KPK4	70415	University of Jyväskylä (FIN)	-	K2	mrk
118	109 KPK5	70708	University of Jyväskylä (FIN)	-	N/A (K15K17K50K51K52)	mrk
119	110 KPK6	71076	University of Jyväskylä (FIN)	-	K17	irp, mrk, fyu, ybt, kfu
120	111 KPK7	2008024	University of Jyväskylä (FIN)	-	K2	mrk, kfu
121	112 KPK8	2008025	University of Jyväskylä (FIN)	-	K13	mrk
122	113 KPK10	AO-8053	University of Jyväskylä (FIN)	-	N/A	mrk
123	114 KPK11	AO-15200	University of Jyväskylä (FIN)	-	K64,K14	mrk
124	115 KPK13	VPKP267	University of Jyväskylä (FIN)	-	K64,K15	mrk
125	116 KPK14	VPKP205	University of Jyväskylä (FIN)	-	K25	irp, mrk, ybt
126	117 KPK15	VPKP284	University of Jyväskylä (FIN)	-	K21	fyu, ybt, all, arc, glx
127	118 KPK16	VPKP374	University of Jyväskylä (FIN)	-	k2	irp, fyu, ybt, mrk
128	119 KPK17	VPKP430	University of Jyväskylä (FIN)	-	k3	irp, fyu, ybt, kfu, mrk
129	120 KPK18	VPKP389	University of Jyväskylä (FIN)	-	k27	irp, mrk, fyu, ybt
130	121 KPK20	VPKP229	University of Jyväskylä (FIN)	-	k25	irp, mrk, ybt
131	122 KPK24	ED502873	University of Jyväskylä (FIN)	-	N/A (K15K17K50K51K52)	irp, mrk, fyu, ybt
132	123 KPK25	N12	University of Jyväskylä (FIN)	-	K51	kfu, mrk
133	124 KPK3r2	-	University of Jyväskylä (FIN)	-	N/A	-
134	125 PT-KP1	-	University of Jyväskylä (FIN)	-	N/A	-
135	126 PT-KP2	-	University of Jyväskylä (FIN)	-	N/A	-
136	127 PT-KP3	-	University of Jyväskylä (FIN)	-	N/A	-
137	128 PT-KP4	-	University of Jyväskylä (FIN)	-	N/A	-
138	129 PT-KP5	-	University of Jyväskylä (FIN)	-	N/A	-
139	130 PT-KP8	-	University of Jyväskylä (FIN)	-	N/A	-

140	131 PT-KP11	-	University of Jyväskylä (FIN)	-	N/A	-
141	132 PT-KP12	-	University of Jyväskylä (FIN)	-	N/A	-
142	133 PT-KP13	-	University of Jyväskylä (FIN)	-	N/A	-
143	134 PT-KP14	-	University of Jyväskylä (FIN)	-	N/A	-
144	135 KP2r2	-	University of Jyväskylä (FIN)	-	N/A	-
145	136 KP2r3	-	University of Jyväskylä (FIN)	-	N/A	-
146	137 KP2r4	-	University of Jyväskylä (FIN)	-	N/A	-
147	138 NKP1	-	University of Jyväskylä (FIN)	-	N/A	-
148	139 NKP2	-	University of Jyväskylä (FIN)	-	N/A	-
149	140 NKP20	-	University of Jyväskylä (FIN)	-	N/A	-
150	141 EKP3	-	University of Jyväskylä (FIN)	-	N/A	-
151	142 EKP8	-	University of Jyväskylä (FIN)	-	N/A	-
152	143 EKP10	-	University of Jyväskylä (FIN)	-	N/A	-
153	144 EKP11	-	University of Jyväskylä (FIN)	-	N/A	-
154	145 PT-KO1	-	University of Jyväskylä (FIN)	-	N/A	-
155	146 KPK1	1534	University of Jyväskylä (FIN)	-	K15K17K50K51K52	-

Table S3. Characteristics and interpretation of OmniLog propagation curves for combinations of *P. aeruginosa* strains and individual phages and phage cocktails.

P. aeruginosa Strain rru Characteristics/p arameters	<u>Cocktail 1</u> Phage Components	<u>Cocktail 2</u> Phage components	<u>Cocktail 3</u> Phage components	<u>Cocktail 4</u> Phage components	<u>Cocktail 5</u> Phage components	<u>Cocktail 6</u> Phage components	<u>Cocktail 7</u> Phage components
PAO1K 221 rru	Cl-32h 161 rru	Cl-42h 135 rru	Cl-48h	In-48h 135 rru	Cl-48h	Cl-48h	Cl-30h PRM, 235 rru
O5-serotype T3SS ExoS oprI A1 oprL B11	Atpa001 Cl-12h PRM, 319 rru	Atpa001 Cl-12h PRM, 319 rru	Atpa005 Cl-28h PRMM, 283 rru	Atpa008 Cl-10h 208 rru	Atpa010 Cl-48h	Atpa012 Cl-8h PRM, 302 rru	Qatpa008 Cl-30h PRM, 245 rru
	Atpa002 Cl-24h PRM, 265 rru	Atpa003 Cl-12h PRM, 248 rru	Atpa006 Cl-28h 237 rru	Atpa009 Cl-24h PRM, 307 rru	Atpa011 Cl-48h	Atpa013 Cl-12h PRM, 285 rru	Qatpa009 Cl-12h PRM, 301 rru
	Atpa003 Cl-12h PRM, 248 rru	Atpa004 Cl-28h PRM, 341 rru	n/a	n/a	n/a	Atpa014 Cl-16h 235 rru	Qatpa010 Cl-16h PRM, 307 rru

Interpratation	<u>Synergy:</u> Increased clearing effect timing.	<u>Synergy:</u> Increased clearing effect timing.	<u>Synergy:</u> Increased clearing effect timing.	<u>Antagonism or not sufficient pfu/ml:</u> Shorten clearing effect timing.	<u>Proto-cooperation:</u> Clearing effect timing is the same.	<u>Synergy:</u> Increased clearing effect timing.	<u>Proto-cooperation:</u> Clearing effect timing is the same.
PAO1 M, 208 rru	Cl-48h	ndh	Cl-48h	ndh	ndh	ndh	ndh
O5-serotype T3SS ExoS oprI A1 oprL B11	Atpa001 Cl-6h 231 rru	ndh	Atpa005 Cl-15h 199 rru	ndh	ndh	ndh	ndh
	Atpa002 Cl-12h 188 rru	ndh	Atpa006 Cl-8h PRM, 188 rru	ndh	ndh	ndh	ndh
	Atpa003 Cl-8h PRM, 294 rru	ndh	n/a	ndh	ndh	ndh	ndh
Interpratation	<u>Synergy:</u> Increased clearing effect timing.	-	<u>Synergy:</u> Increased clearing effect timing.	ndh	ndh	ndh	ndh
CN573 222 rru	Cl-48h	Cl-48h	Cl-48h	Cl-48h	Cl-48h	Cl-48h	Cl-20h 187 rru
O1-serotype oprI B1 oprL B09 ExoS	Atpa001 Cl-28h 234 rru	Atpa001 Cl-28h 234 rru	Atpa005 Cl-48h	Atpa008 Cl-18h 189 rru	Atpa010 Cl-48h	Atpa012 ln-36h 204 rru	Qatpa008 Cl-28h 122 rru
	Atpa002 Cl-36h 225 rru	Atpa003 Cl-28h PRM, 265 rru	Atpa006 Cl-48h	Atpa009 Cl-48h	Atpa011 Cl-48h	Atpa013 Cl-30h PRM, 248 rru	Qatpa009 Cl-12h PRM, 252 rru
	Atpa003 Cl-28h PRM, 265 rru	Atpa004 Cl-48h	n/a	n/a	n/a	Atpa014 Cl-14h 265 rru	Qatpa010 Cl-48h
Interpratation	<u>Synergy:</u> Increased clearing effect timing.	<u>Proto-cooperation:</u> Clearing effect timing is the same.	<u>Proto-cooperation:</u> Clearing effect timing is the same.	<u>Proto-cooperation:</u> Clearing effect timing is the same.	<u>Proto-cooperation:</u> Clearing effect timing is the same.	<u>Synergy:</u> Increased clearing effect timing.	<u>Antagonism or not sufficient pfu/ml:</u> Shorten clearing effect timing
PAV237 228 rru	Cl-20h M, 255 rru	Cl-48h	Cl-48h	Cl-48h	Cl-48h	Cl-48h	Cl-8h PRM, 296 rru
	Atpa001 Cl-20h	Atpa001 Cl-20h	Atpa005 Cl-48h	Atpa008 Cl-12h	Atpa010 Cl-14h	Atpa012 Cl-6h	Qatpa008 Cl-20h PRM, 271 rru

<i>lasB</i> gene coding for elastase B	224 rru	224 rru		213 rru	209 rru	220 rru	
	Atpa002 Cl-10h PRM, 263 rru	Atpa003 Cl-10h PRM, 285 rru	Atpa006 Cl-12h 193 rru	Atpa009 Cl-48h	Atpa011 Cl-48h	Atpa013 Cl-10h 179 rru	Qatpa009 Cl-8h PRM, 295 rru
	Atpa003 Cl-10h PRM, 285 rru	Atpa004 Cl-48h	n/a	n/a	n/a	Atpa014 Cl-48h	Qatpa010 Cl-14h 209 rru
Interpratation	<u>Proto-cooperation:</u> Clearing effect timing is the same.	<u>Proto-cooperation:</u> Clearing effect timing is the same.	<u>Proto-cooperation:</u> Clearing effect timing is the same.	<u>Proto-cooperation:</u> Clearing effect timing is the same.	<u>Proto-cooperation:</u> Clearing effect timing is the same.	<u>Proto-cooperation:</u> Clearing effect timing is the same.	<u>Antagonism or not sufficient pfu/ml:</u> Shorten clearing effect timing
PA14 185 rru	ndh	ndh	Cl-48h	ndh	Cl-48h	ndh	ndh
O10-serotype, oprI B1 oprL A05 T3SS ExoU	ndh	ndh	Atpa005 Cl-6h 180 rru	ndh	Atpa010 Cl-12h 193 rru	ndh	ndh
	-	-	Atpa006 Cl-24h M, 245 rru	-	Atpa011 Cl-26h M, 193 rru	-	-
Interpratation	-	-	<u>Synergy:</u> Increased clearing effect timing.	-	<u>Synergy:</u> Increased clearing effect timing.	-	-
Is573 248 rru	ndh	ndh	ndh	ndh	ndh	Cl-48h	Cl-30h M, 205rru
O11-serotype, oprI B1 oprL B02 ExoU	ndh	ndh	ndh	ndh	ndh	Atpa012 Cl-6h 239 rru	Qatpa008 Cl-16h 225 rru
	ndh	ndh	ndh	ndh	ndh	Atpa013 Cl-8h 257 rru	Qatpa009 Cl-14h 242 rru
	ndh	ndh	ndh	ndh	ndh	Atpa014 Cl-48h	Qatpa010 Cl-8h 249 rru
Interpratation	-	-	-	-	-	<u>Protocooperation:</u> Clearing effect timing is the same.	<u>Synergy:</u> Increased clearing effect timing.
A11 241 rru	Cl-28h 216 rru	ndh	ndh	ndh	Cl-30h 210 rru	ndh	ndh
oprI B1 oprL B12	Atpa001 Cl-0h	ndh	ndh	ndh	Atpa010 Cl-6h	ndh	ndh

ExoS	250 rru				250 rru		
	Atpa002 CI-6h 198 rru	ndh	ndh	ndh	Atpa011 CI-26h 252 rru	ndh	ndh
	Atpa003 CI-8h 197 rru	ndh	ndh	ndh	ndh	ndh	ndh
Interpratation	<u>Synergy:</u> Increased clearing effect timing.	ndh	ndh	ndh	<u>Synergy:</u> Increased clearing effect timing.	ndh	ndh
Is580 222 rru	ndh	ndh	ndh	CI-44h 148 rru	CI-48h	ndh	ndh
O3-serotype oprI B1 oprL B03 ExoS	ndh	ndh	ndh	Atpa008 CI-6h 188 rru	Atpa010 CI-10h 213 rru	ndh	ndh
	ndh	ndh	ndh	Atpa009 CI-10h 193 rru	Atpa011 CI-48h	ndh	ndh
Interpratation	ndh	ndh	ndh	<u>Synergy:</u> Increased clearing effect timing.	<u>Protocooperation:</u> Clearing effect timing is the same.	ndh	ndh
PA7 261 rru	CI-10h 246 rru	- PRM 298 rru	- 212 rru	- PRM 283 rru	CI-14h PRM 296 rru	CI-8h 247 rru	CI-10h PRM 297 rru
MDR O12-serotype TPS ExlA oprI F1 oprL E03	Atpa001 - 280 rru	Atpa001 - 280 rru	Atpa005 - 256 rru	Atpa008 - 236 rru	Atpa010 - PRM 275 rru	Atpa012 - PRM 287 rru	Qatpa008 CI-20h 275 rru
	Atpa002 - 255 rru	Atpa003 284 rru	Atpa006 - 208 rru	Atpa009 - 227 rru	Atpa011 - CI-14h	Atpa013 - PRM 288 rru	Qatpa009 - 236 rru
	Atpa003 - 284 rru	Atpa004 - 265 rru	n/a	n/a	n/a	Atpa014 CI-8h 274 rru	Qatpa010 CI-10h 297 rru
Interpratation	<u>Synergy:</u> clearing effect timing for 10h.	<u>Antagonism or not sufficient pfu/ml:</u>	-	<u>Antagonism or not sufficient pfu/ml:</u>	<u>Protocooperation:</u>	<u>Protocooperation:</u>	<u>Antagonism or not sufficient pfu/ml:</u>

could be not sufficient pfu/ml.	Increased rru	Increased rru	Clearing effect timing is the same. But with PRM, could be not sufficient pfu/ml.	Clearing effect timing is the same.	Shorten clearing effect timing.
---------------------------------	---------------	---------------	--	-------------------------------------	---------------------------------

Table S4. Characteristics and interpretation of OmniLog propagation curves for combinations of *K. pneumoniae* strains and individual phages and phage cocktails.

K. pneumoniae strains/ Capsule type	<u>Cocktail 1</u> Phage components	<u>Cocktail 2</u> Phage components	<u>Cocktail 3</u> Phage components	<u>Cocktail 4</u> Phage components	<u>Cocktail 5</u> Phage components	<u>Cocktail 6</u> Phage components	<u>Cocktail 7</u> Phage components
0682 192 rru	CI-48h	CI-48h	CI-48h	CI-48h	CI-48h	CI-48h	CI-48h 196 rru
K81	Atkp001 In-48h 163 rru	Atkp001 In-48h 163 rru	Atkp004 CI-48h	Atkp007 In-48h 136 rru	Atkp009 CI-48h	Atkp012: CI-48h	Atkp014: CI-48h
	Atkp008 In-48h 16 rru	Atkp009 In-48h 106 rru	Atkp006 In-48h 180 rru	Atkp008 In-48h 116 rru	Atkp010 In-48h	Atkp016: CI-48h	Atkp015: In-48h 112 rru
	n/a	n/a	n/a	n/a	n/a	n/a	Atkp016: CI-48h
Interpratation	<u>Proto-cooperation:</u> Clearing effect timing is the same.	<u>Proto-cooperation:</u> Clearing effect timing is the same.	<u>Proto-cooperation:</u> Clearing effect timing is the same.	<u>Proto-cooperation:</u> Clearing effect timing is the same.	<u>Proto-cooperation:</u> Clearing effect timing is the same.	<u>Proto-cooperation:</u> Clearing effect timing is the same.	<u>Proto-cooperation:</u> Clearing effect timing is the same.
atcc27736 250 rru	ndh	IN-8h 178 rru	ndh	ndh	ndh	CI-48h	CI-48h
Serotype-30	ndh	Atkp001 CI-0h 250 rru	ndh	ndh	ndh	Atkp012: CI-48h	Atkp014: CI-12h 218 rru
	ndh	Atkp009 CI-0h 250 rru	ndh	ndh	ndh	Atkp016: CI-48h	Atkp015: CI-0h
	ndh	n/a	ndh	ndh	ndh	n/a	Atkp016: CI-48h
Interpratation	ndh	<u>Synergy:</u> Increased clearing effect timing.	ndh	ndh	ndh	<u>Proto-cooperation:</u> Clearing effect timing is the same.	<u>Synergy:</u> Increased clearing effect timing.

nctc13438 272 rru	ndh	ndh	ndh	ndh	ndh	Cl-48h	Cl-48h
carbapenemase KPC-3	ndh	ndh	ndh	ndh	ndh	Atkp012 Cl-0h	Atkp014 Cl-0h
	ndh	ndh	ndh	ndh	ndh	Atkp016 Cl-16h 201 rru	Atkp015 Cl-0h
	ndh	ndh	ndh	ndh	ndh	n/a	Atkp016 Cl-16h 201 rru
Interpratation	ndh	ndh	ndh	ndh	ndh	<u>Synergy:</u> Increased clearing effect timing.	<u>Synergy:</u> Increased clearing effect timing.
SB4385 255 rru	ndh	ndh	ndh	ndh	ndh	Cl-48h	Cl-48h
K1	ndh	ndh	ndh	ndh	ndh	Atkp012 Cl-6h	Atkp014 Cl-0h
	ndh	ndh	ndh	ndh	ndh	Atkp016 Cl-48h	Atkp015 Cl-0h
	ndh	ndh	ndh	ndh	ndh	n/a	Atkp016 Cl-48h
Interpratation	ndh	ndh	ndh	ndh	ndh	<u>Proto- cooperation:</u> Clearing effect timing is the same.	<u>Proto- cooperation:</u> Clearing effect timing is the same.
10394 265 rru	ndh	ndh	ndh	ndh	ndh	In-48h 206 rru	In-48h 185 rru
K62	ndh	ndh	ndh	ndh	ndh	Atkp012 Cl-0h	Atkp014 Cl-0h
	ndh	ndh	ndh	ndh	ndh	Atkp016 Cl-0h	Atkp015 Cl-0h
	ndh	ndh	ndh	ndh	ndh	n/a	Atkp016 Cl-0h
	ndh	ndh	ndh	ndh	ndh	<u>Synergy:</u> Inhibition effect up to 48h	<u>Synergy:</u> Inhibition effect up to 48h
70165	ndh	In-48h 194 rru	In-48h 202 rru	Cl-10 h In-48h 216 rru	In-48h 185 rru	ndh	ndh
K2	ndh	Atkp001 Cl-0h 224 rru	Atkp004: In-48h 201 rru	Atkp007 Cl-8h 257 rru	Atkp010 In-48h 185 rru	ndh	ndh
	ndh	Atkp009 Cl-0h 246 rru	Atkp006: Cl-0h 246 rru	Atkp008 Cl-8h 243 rru	Atkp009 Cl-0h 246 rru	ndh	ndh

Interpratation	ndh	<u>Synergy:</u> Increases clearing effect timing.	<u>Proto- cooperation:</u> Clearing effect timing is the same.	<u>Synergy:</u> Increases clearing effect timing.	<u>Proto- cooperation:</u> Clearing effect timing is the same.	ndh	ndh
VPKP389	CI-48h	CI-28h In-48h	ndh	ndh	CI-48h	ndh	ndh
K27	Atpk001 CI-0h	Atpk001 CI-0h	ndh	ndh	Atpk009 In-48h	ndh	ndh
	Atpk008 CI-12h	Atpk009 In-48h	ndh	ndh	Atpk010 CI-0h	ndh	ndh
Interpratation	<u>Synergy:</u> Increases clearing effect timing.	<u>Proto- cooperation:</u> Clearing effect timing is the same.	ndh	ndh	<u>Proto- cooperation:</u> Clearing effect timing is the same.	ndh	ndh

Abbreviations: CL, clearing; In, Inhibition; rru, relative respiration unit; PRM, phage resistant mutant; ndh, not described here; “-”, no activity; n/a, not applicable.

Figures S1-S15. *P. aeruginosa* phages EOP.

Figure S1. EOP of *P. aeruginosa* phage Atpa001

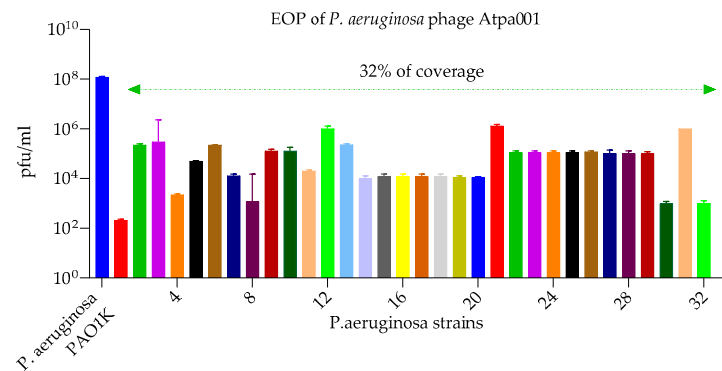


Figure S2. EOP of *P. aeruginosa* phage Atpa002

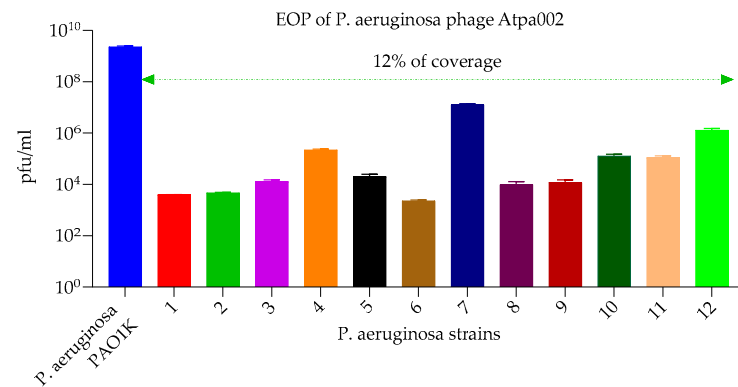


Figure S3. EOP of *P. aeruginosa* phage Atpa003

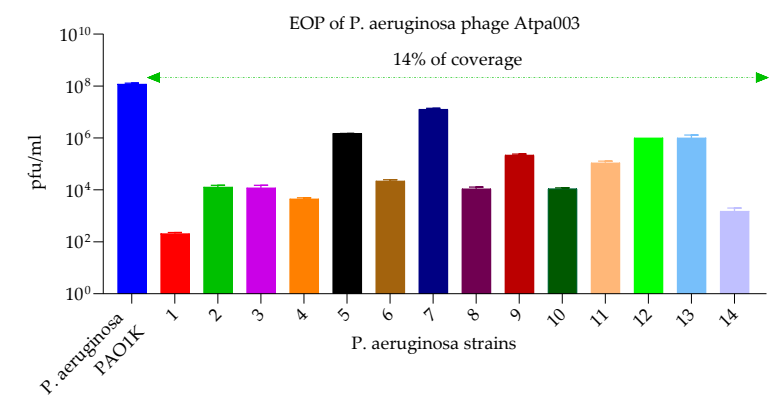


Figure S4. EOP of *P. aeruginosa* phage Atpa004

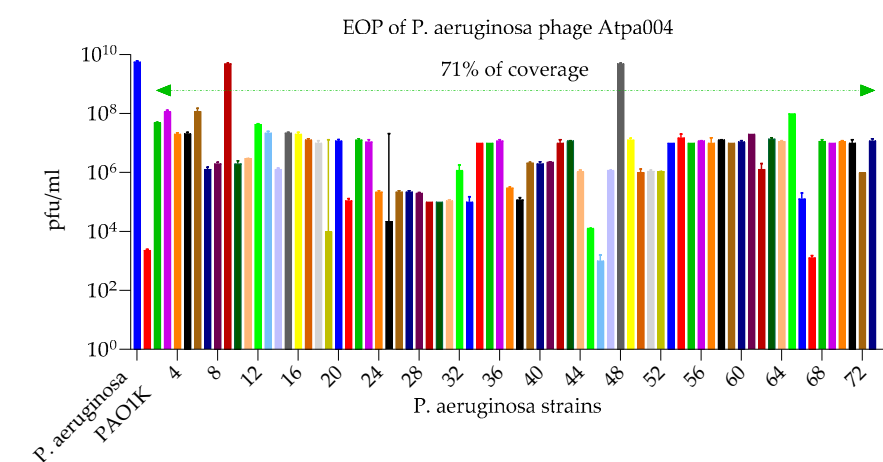


Figure S5. EOP of *P. aeruginosa* phage Atpa005

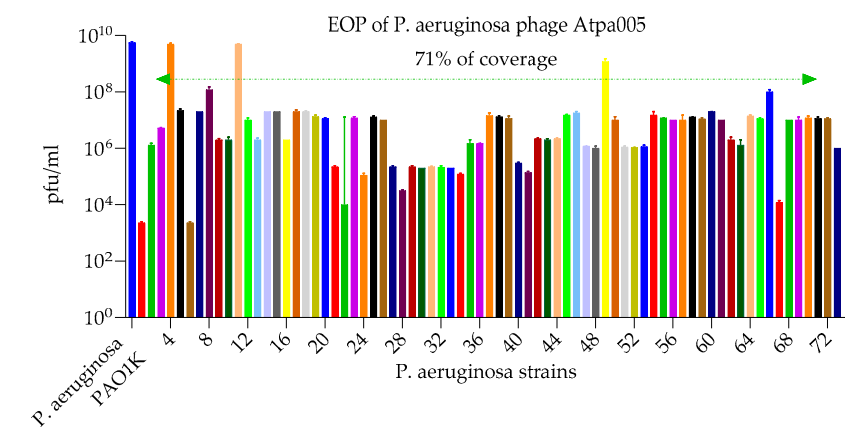


Figure S6. EOP of *P. aeruginosa* phage Atpa006.

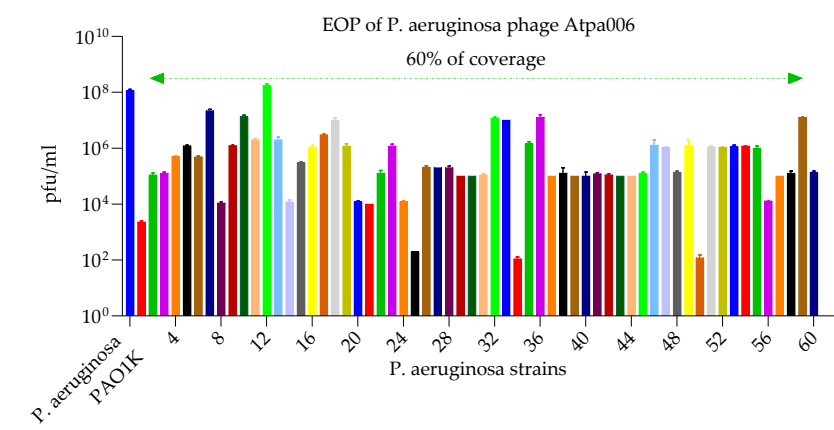


Figure S7. EOP of *P. aeruginosa* phage Atpa008

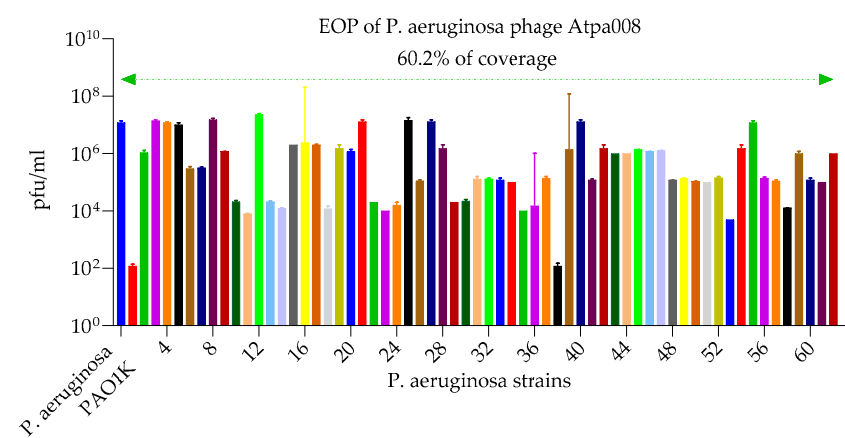


Figure S8. EOP of *P. aeruginosa* phage Atpa009

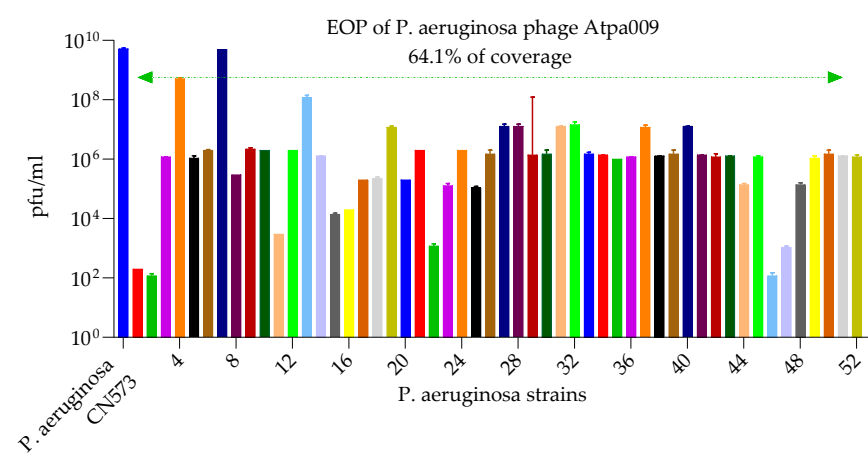


Figure S9. EOP of *P. aeruginosa* phage Atpa010

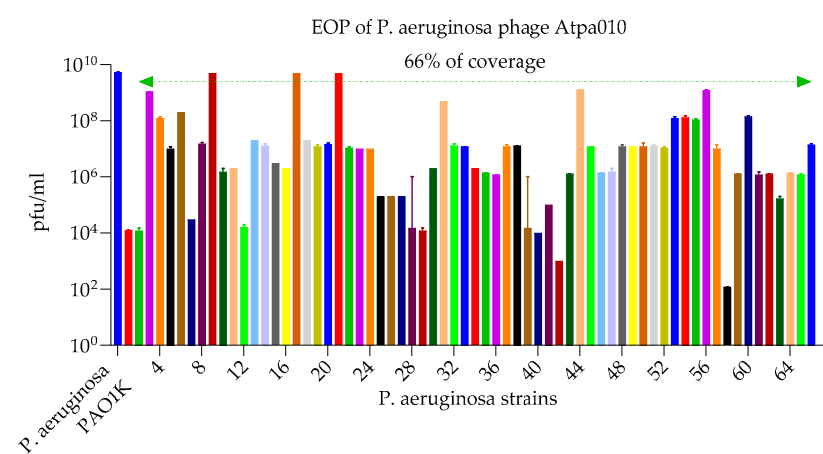


Figure S10. EOP of *P. aeruginosa* phage Atpa011

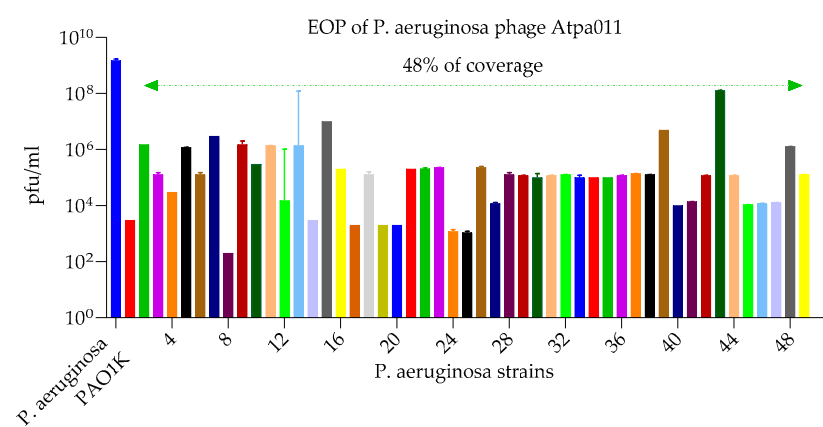


Figure S11. EOP of *P. aeruginosa* phage Atpa012

Figure S12. EOP of *P. aeruginosa* phage Atpa013

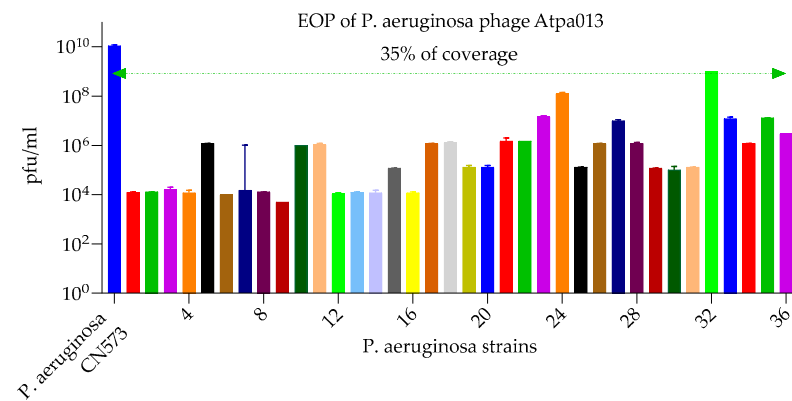
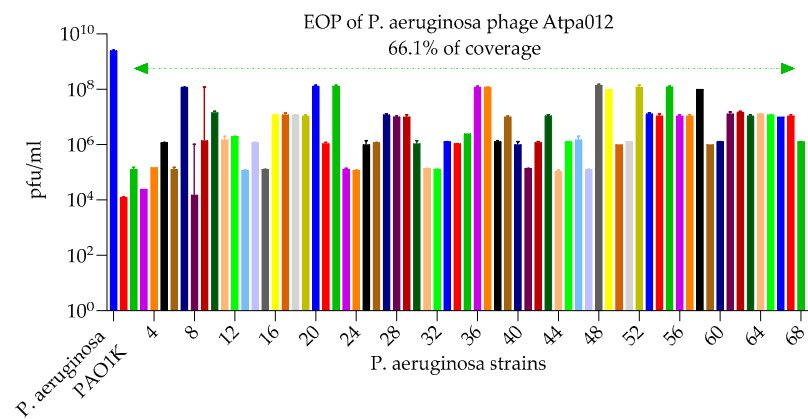


Figure S13. EOP of *P. aeruginosa* phage AQapa008

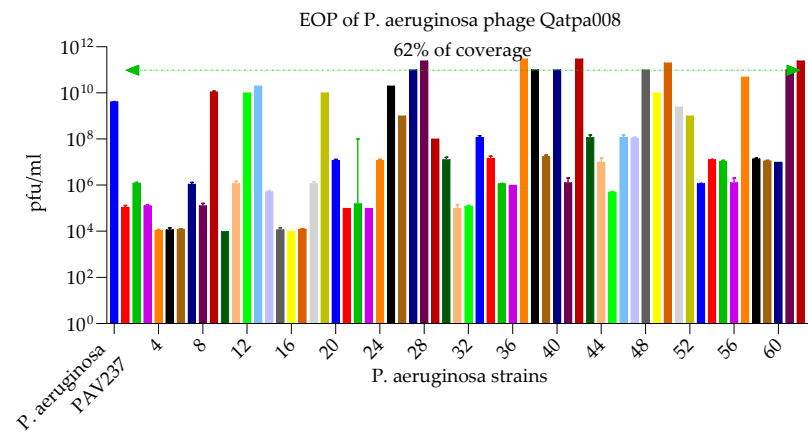


Figure S14. EOP of *P. aeruginosa* phage AQapa009

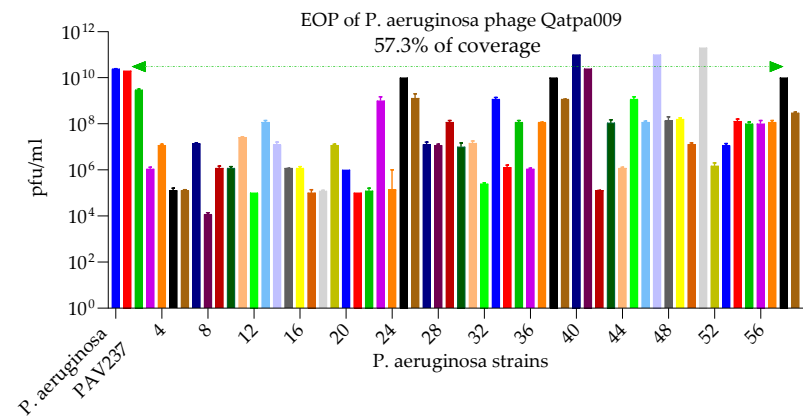


Figure S15. EOP of *P. aeruginosa* phage AQapa010

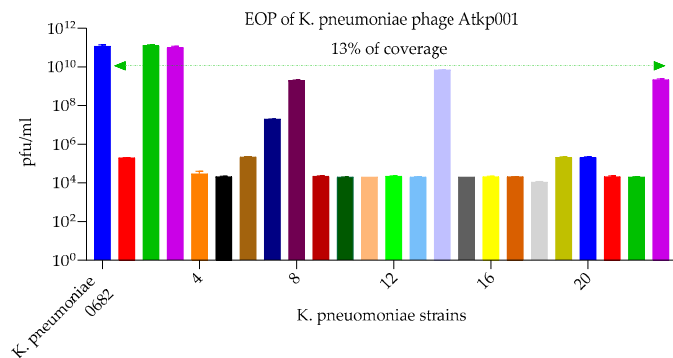


Figure S16. EOP of *K. pneumoniae* phage Atkp001

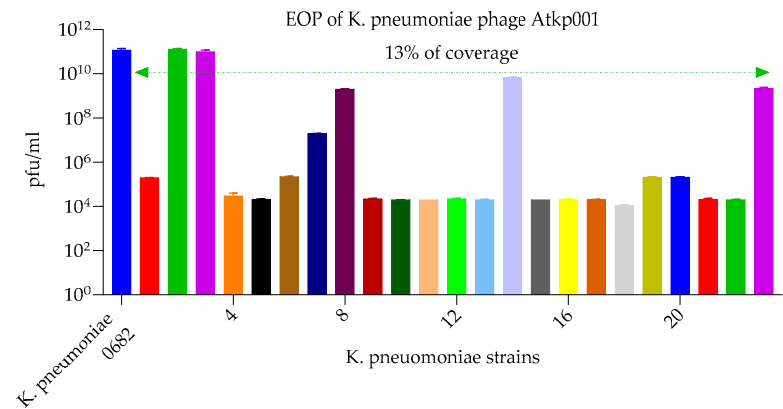


Figure S17. EOP of *K. pneumoniae* phage Atkp004

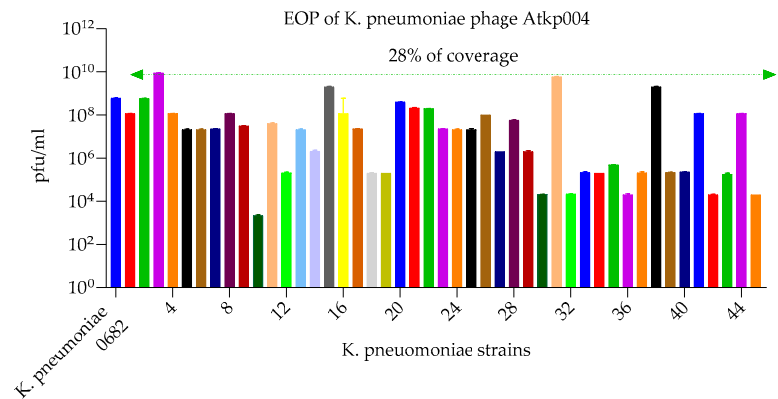


Figure S18. EOP of *K. pneumoniae* phage Atkp006

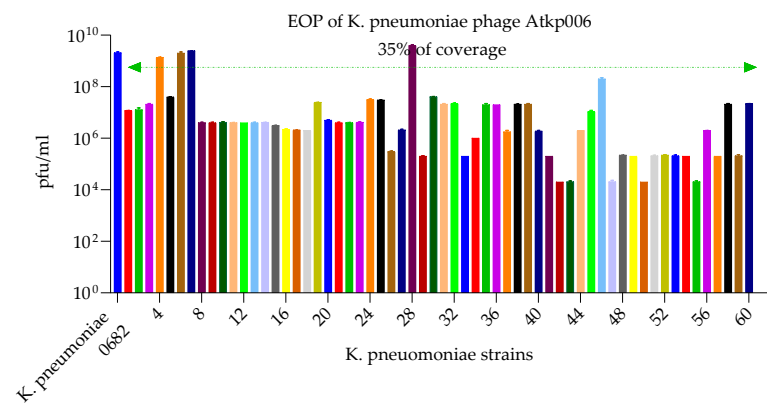


Figure S19. EOP of *K. pneumoniae* phage Atkp007

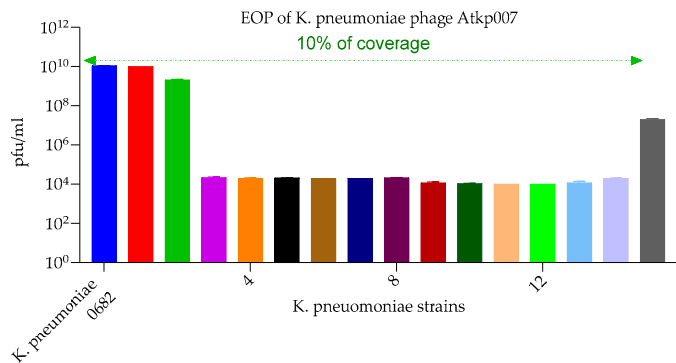


Figure S20. EOP of *K. pneumoniae* phage Atkp008

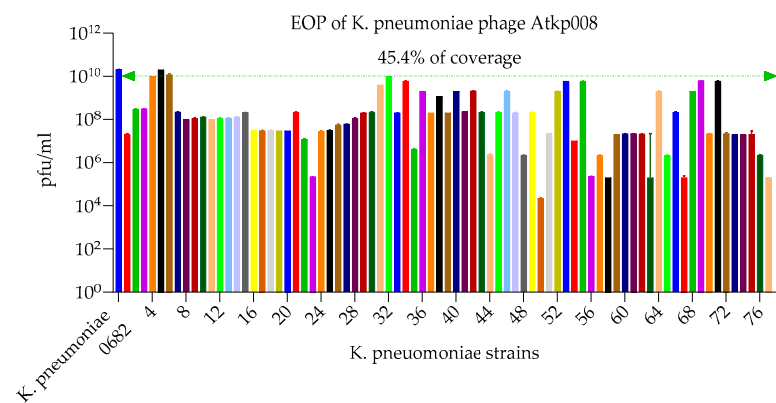


Figure S21. EOP of *K. pneumoniae* phage Atkp009

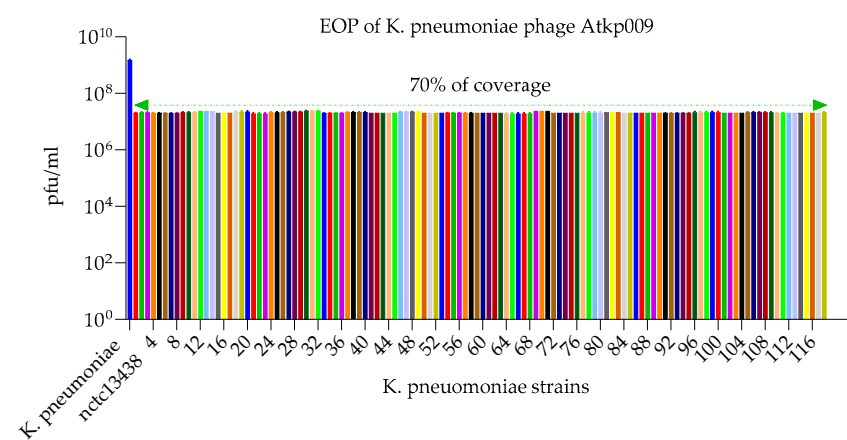


Figure S22. EOP of *K. pneumoniae* phage Atkp012

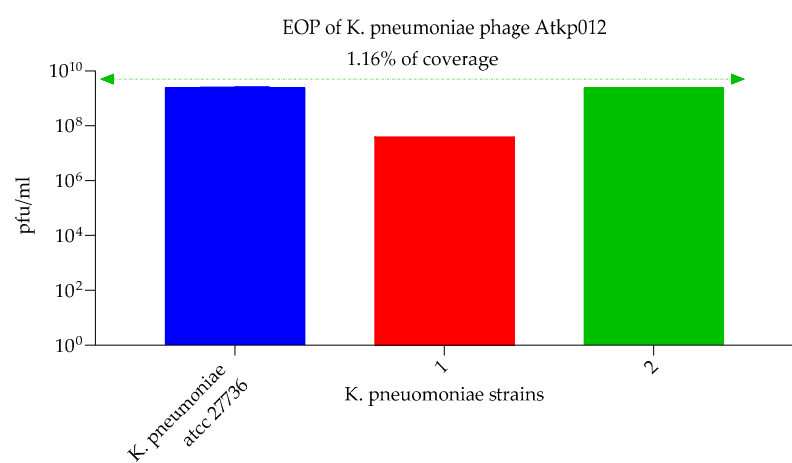


Figure S23. EOP of *K. pneumoniae* phage Atkp014

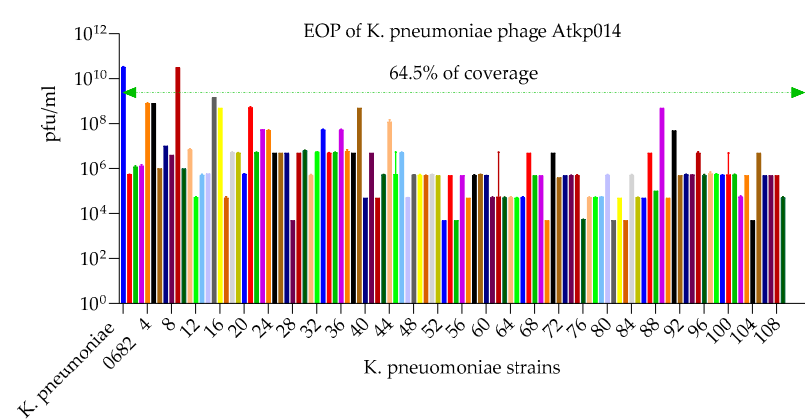


Figure S24. EOP of *K. pneumoniae* phage Atkp015

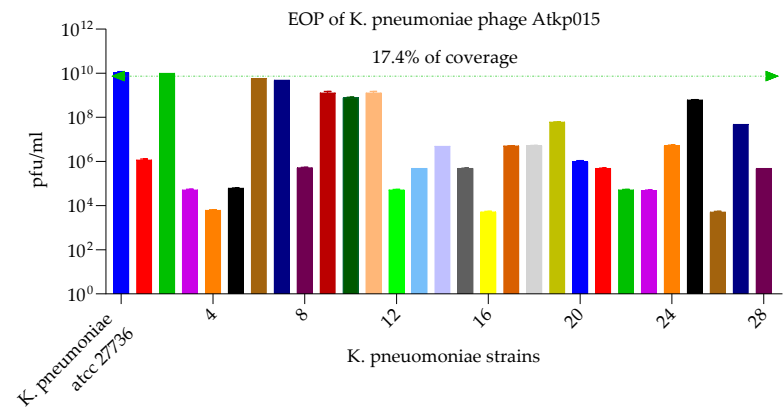
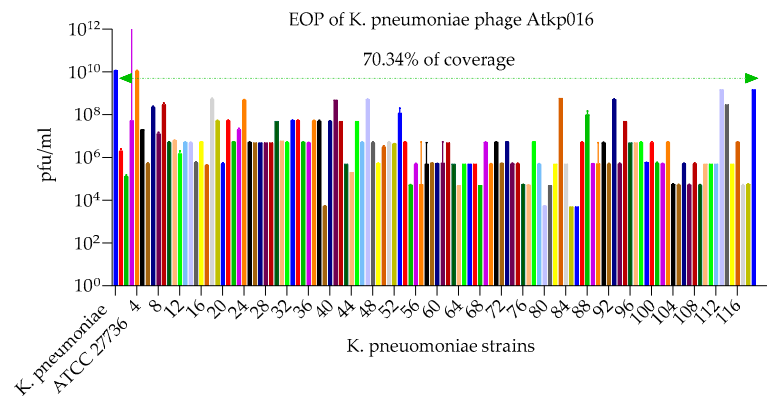


Figure S25. EOP of *K. pneumoniae* phage Atkp016



Figures S26-S40. Appelmans assay of *P. aeruginosa* phages.

Figure S26. Appelmans assay of *P. aeruginosa* phage Atpa001

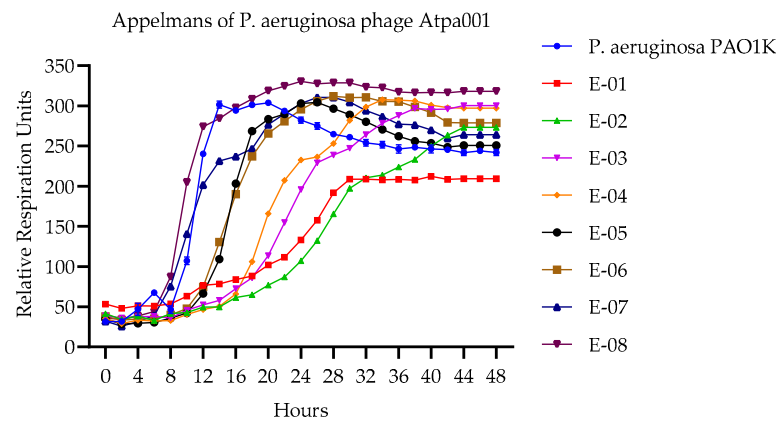


Figure S27. Appelmans assay of *P. aeruginosa* phage Atpa002

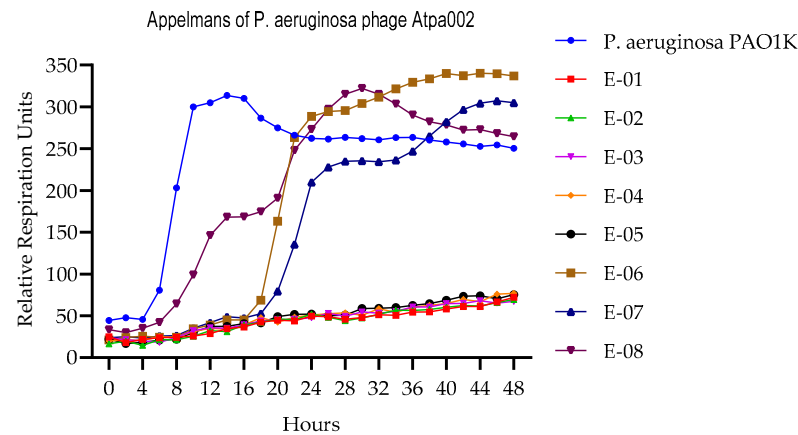


Figure S28. Appelmans assay of *P. aeruginosa* phage Atpa003

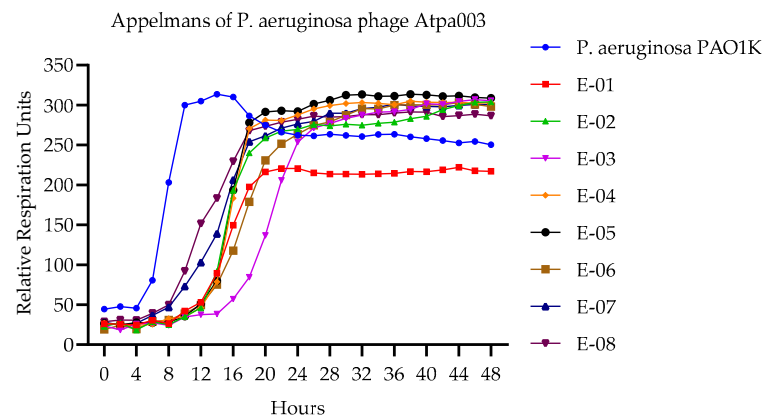


Figure S29. Appelmans assay of *P. aeruginosa* phage Atpa004

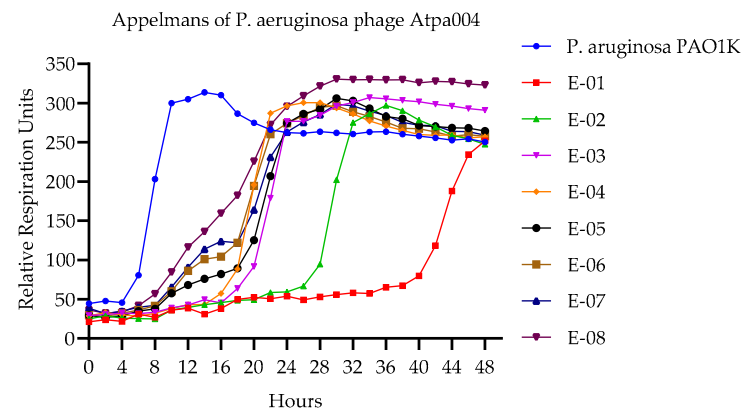


Figure S30. Appelmans assay of *P. aeruginosa* phage Atpa005

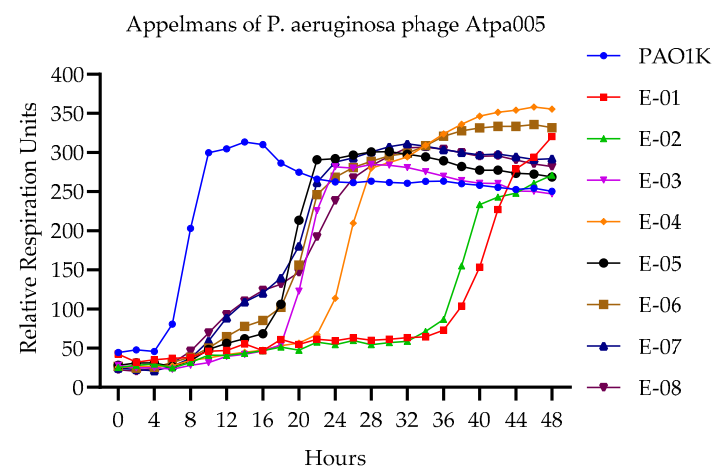


Figure S31. Appelmans assay of *P. aeruginosa* phage Atpa006

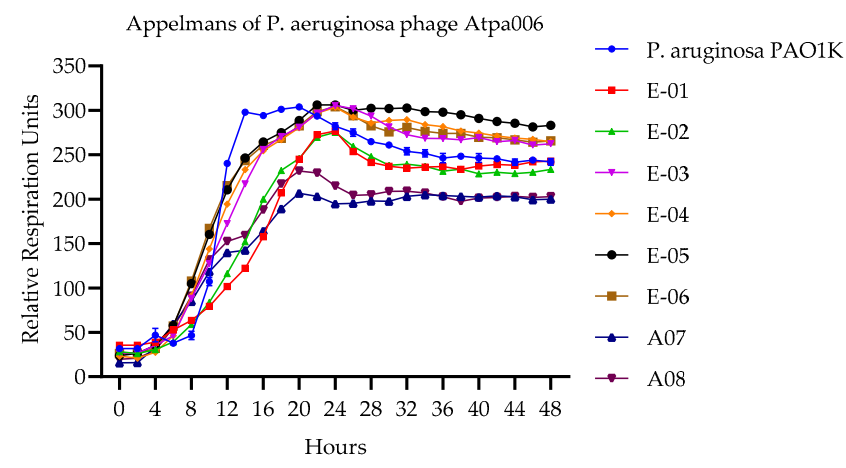


Figure S32. Appelmans assay of *P. aeruginosa* phage Atpa008

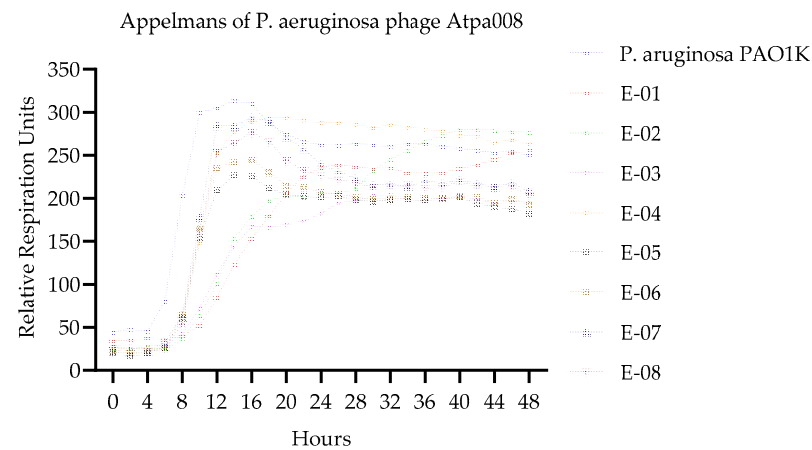


Figure S33. Appelmans assay of *P. aeruginosa* phage Atpa009

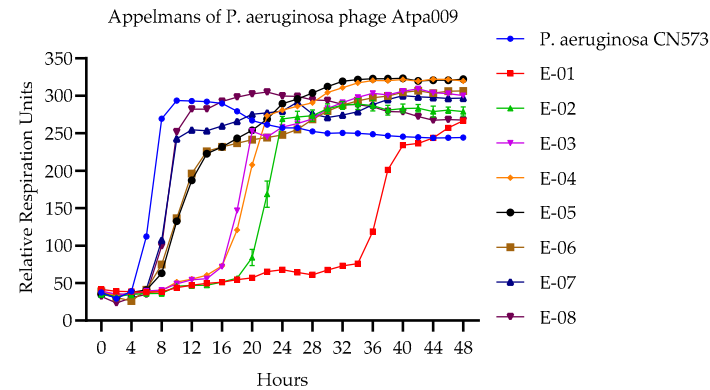


Figure S34. Appelmans assay of *P. aeruginosa* phage Atpa010

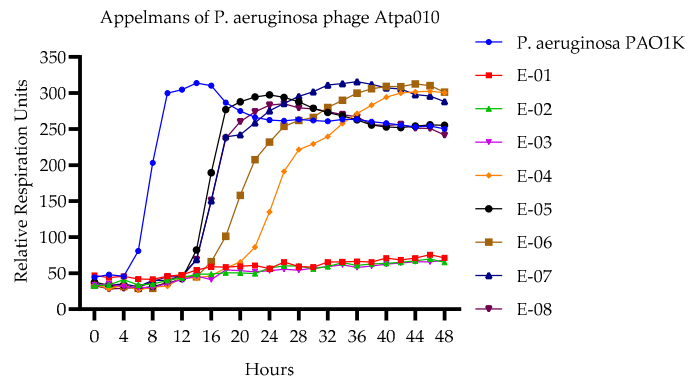


Figure S35. Appelmans assay of *P. aeruginosa* phage Atpa011

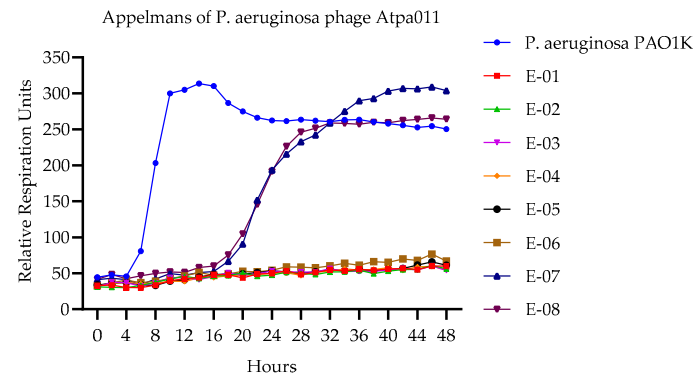


Figure S36. Appelmans assay of *P. aeruginosa* phage Atpa012

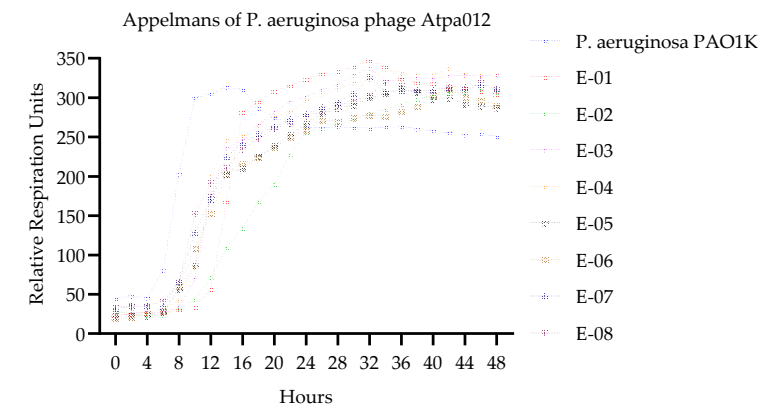


Figure S37. Appelmans assay of *P. aeruginosa* phage Atpa013

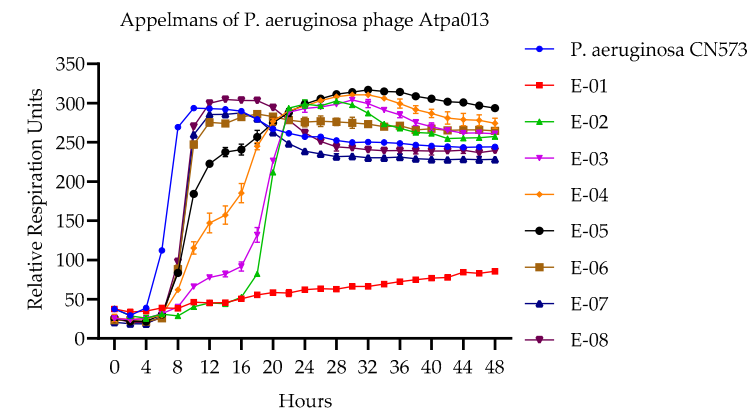


Figure S38. Appelmans assay of *P. aeruginosa* phage Qatpa008

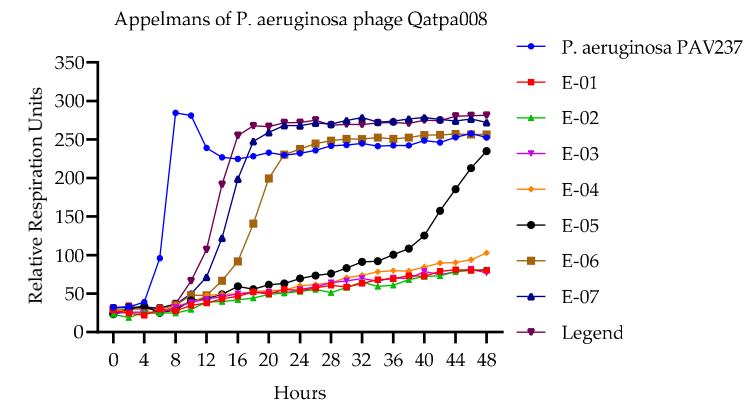


Figure S39. Appelmans assay of *P. aeruginosa* phage Qatpa009

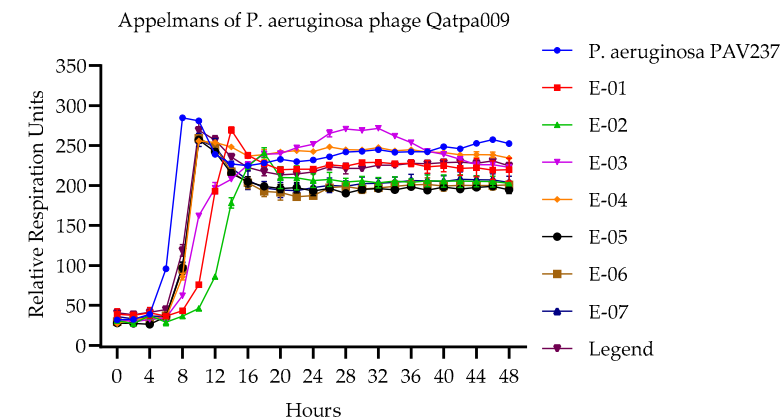
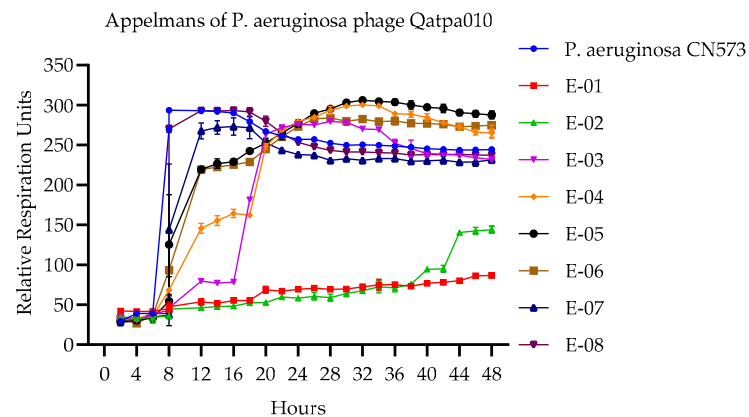


Figure S40. Appelmans assay of *P. aeruginosa* phage Qatpa010



Figures S41-S50. Appelmans assay of *K. pneumoniae* phages.

Figure S41. Appelmans assay of *P. aeruginosa* phage Atkp001

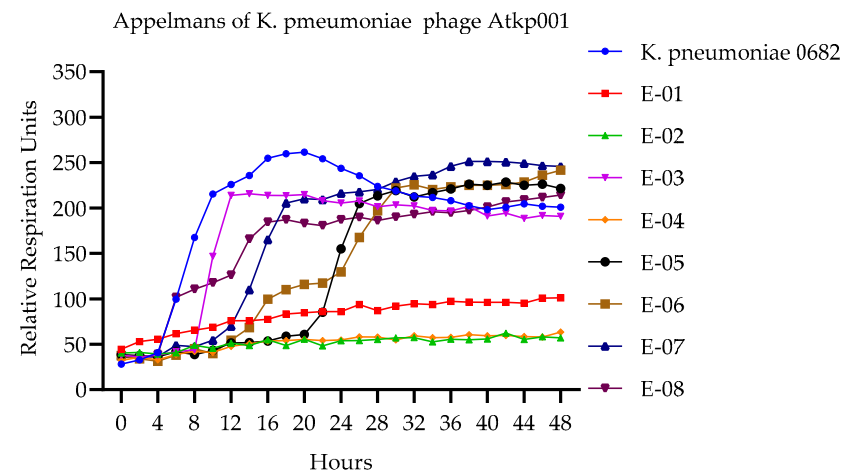


Figure S42. Appelmans assay of *P. aeruginosa* phage Atkp004

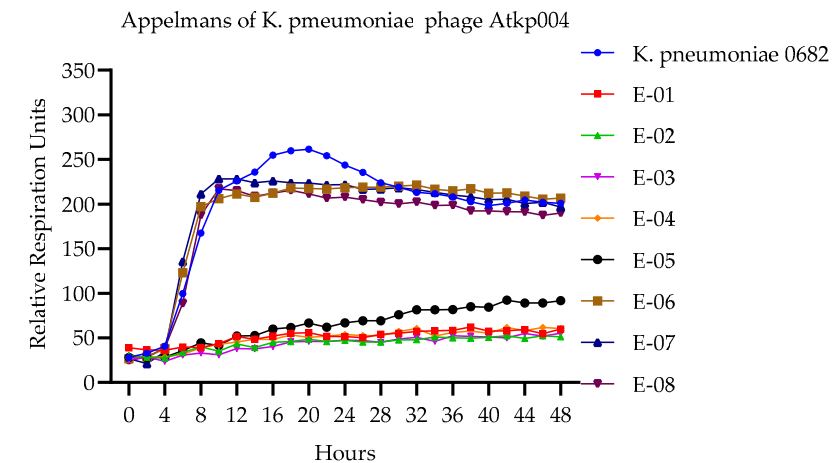


Figure S43. Appelmans assay of *P. aeruginosa* phage Atkp006

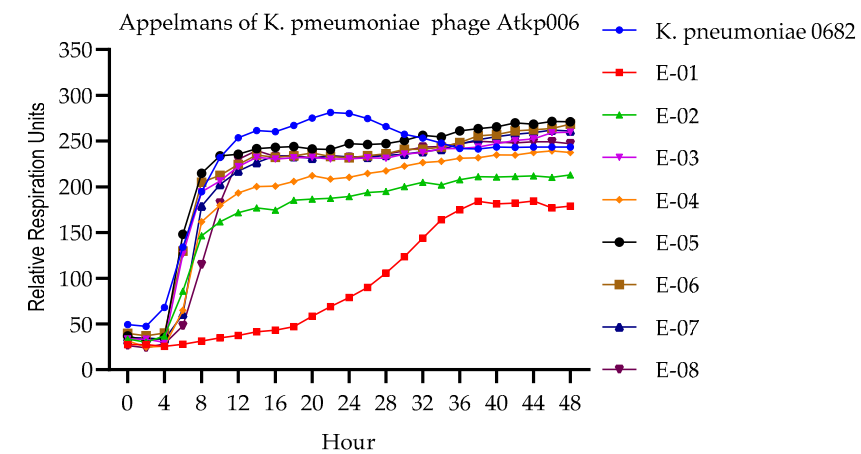


Figure S45. Appelmans assay of *P. aeruginosa* phage Atkp008

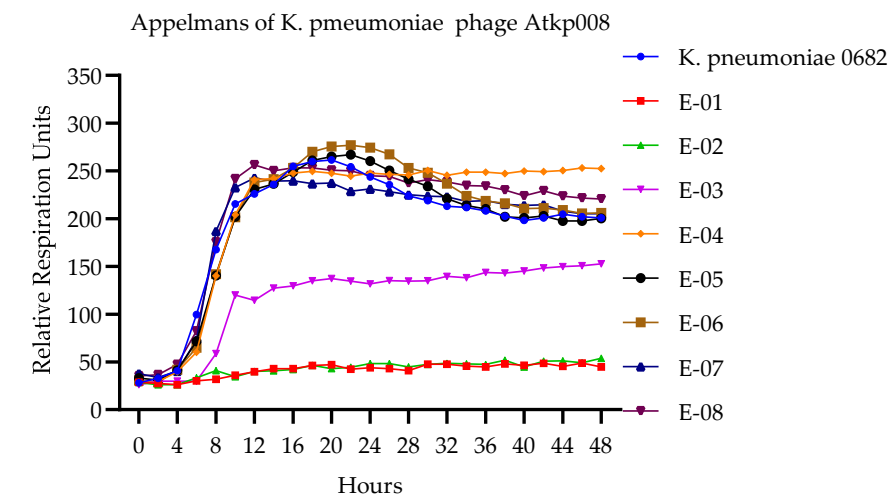


Figure S44. Appelmans assay of *P. aeruginosa* phage Atkp007

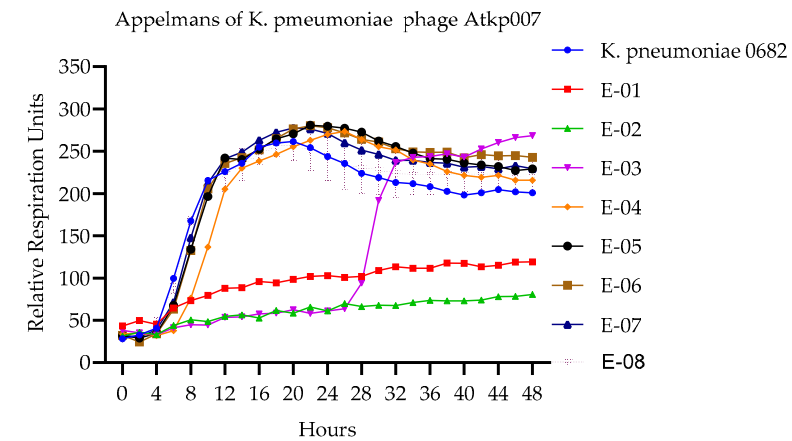


Figure S46. Appelmans assay of *P. aeruginosa* phage Atkp009

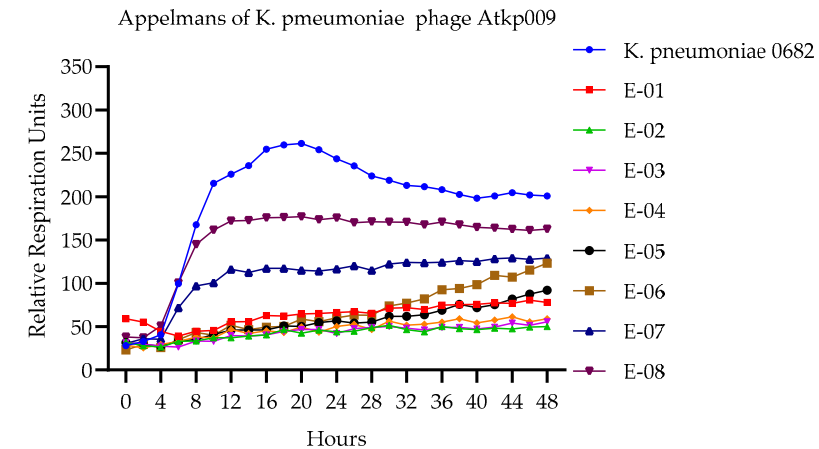


Figure S47. Appelmans assay of *P. aeruginosa* phage Atkp010

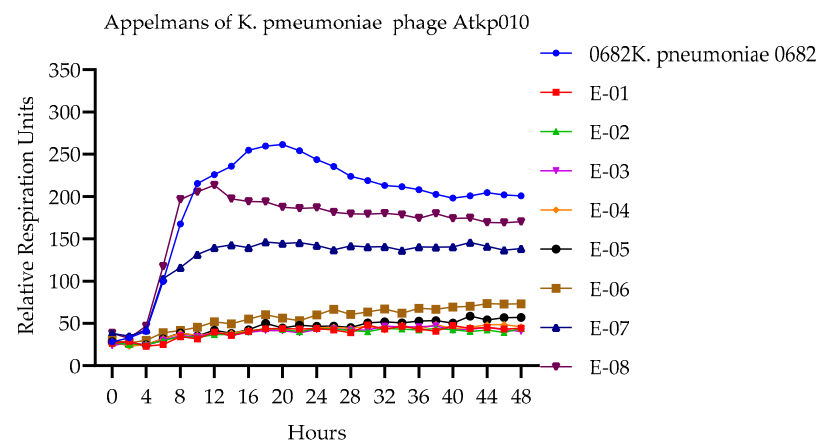


Figure S49. Appelmans assay of *P. aeruginosa* phage Atkp014

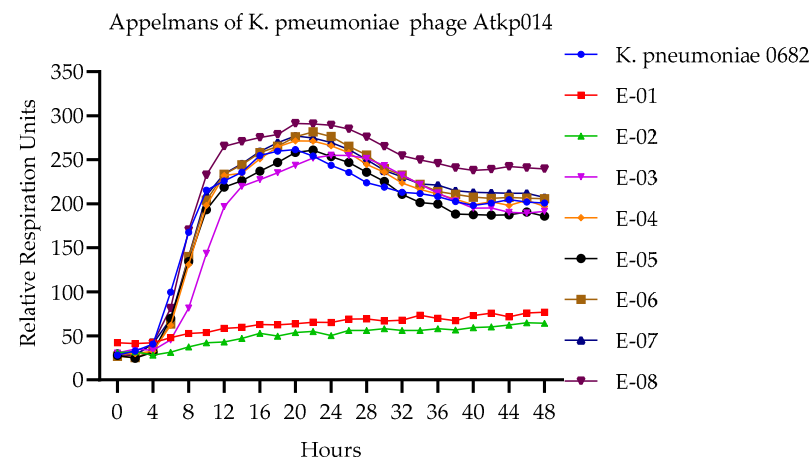


Figure S48. Appelmans assay of *P. aeruginosa* phage Atkp012

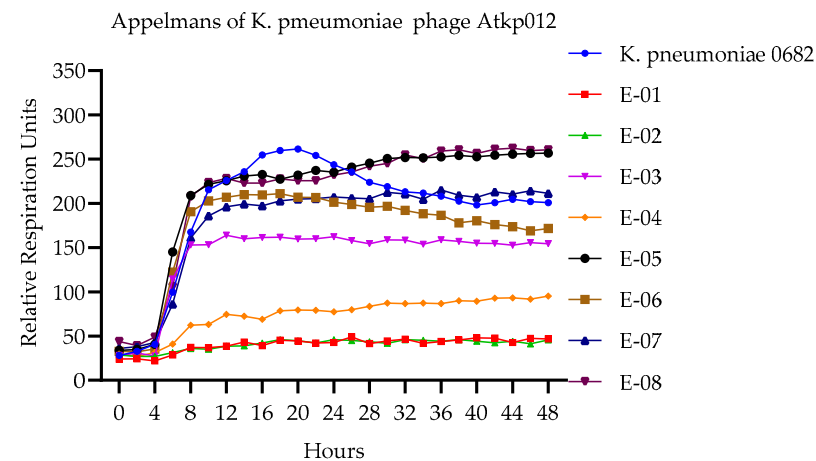


Figure S50. Appelmans assay of *P. aeruginosa* phage Atkp015

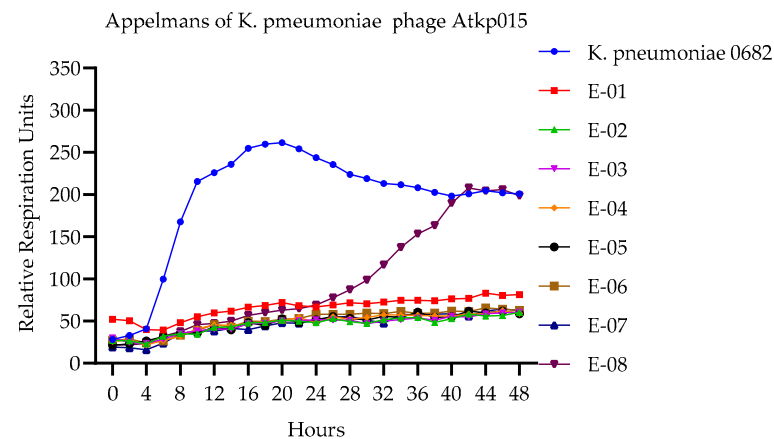


Figure S51. The determination of cfu/ml and pfu/ml at the end point of the OmniLog 48 h incubation of *P. aeruginosa* phage cocktails on CN573.

Determination of cfu/ml and pfu/ml after treatment with cocktails

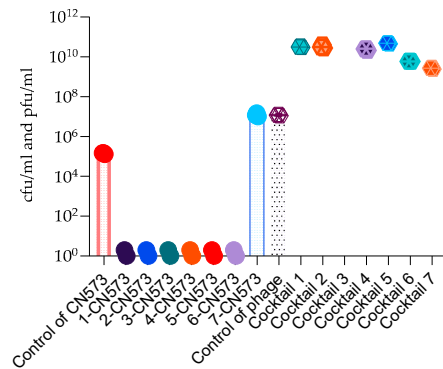


Figure S52. The determination of cfu/ml and pfu/ml at the end point of the OmniLog 48 h incubation of *P. aeruginosa* phage cocktails on PAV237.

Determination of cfu/ml and pfu/ml after treatment with cocktails

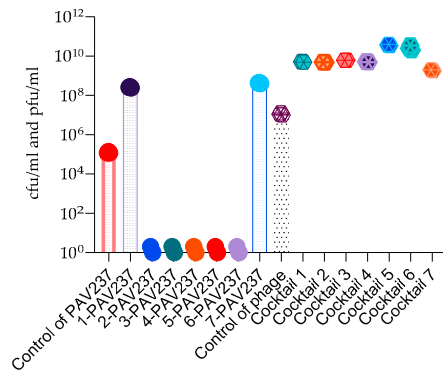
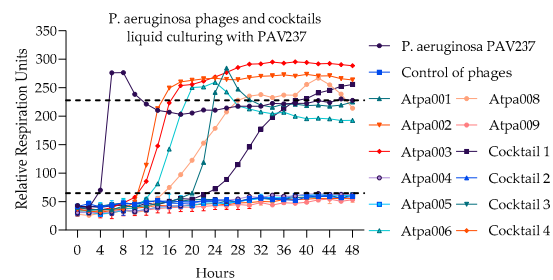
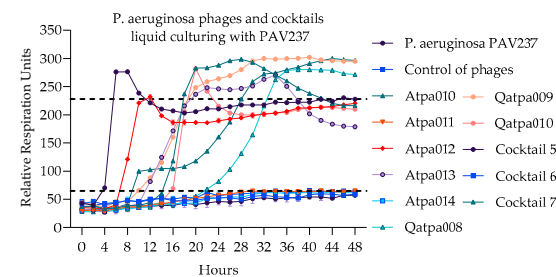


Figure S53. (a) the lytic activity curves of *P. aeruginosa* phage's Atpa001-Atpa009 and cocktails 1-4 on PAV237; (b) the lytic activity curves of *P. aeruginosa* phage's Atpa009-Atpa014, Qatpa008-Qatpa010 and cocktails 5-7 on PAV237.



(a)



(b)

Figure S54. (a) the lytic activity curves of *P. aeruginosa* phage’s Atpa001-Atpa006 and cocktails 1, 3 on PAO1; (b) the lytic activity curves of *P. aeruginosa* phage’s Atpa005-Atpa006 and Atpa010-Atpa011 and cocktails 3, 5 on PA14.

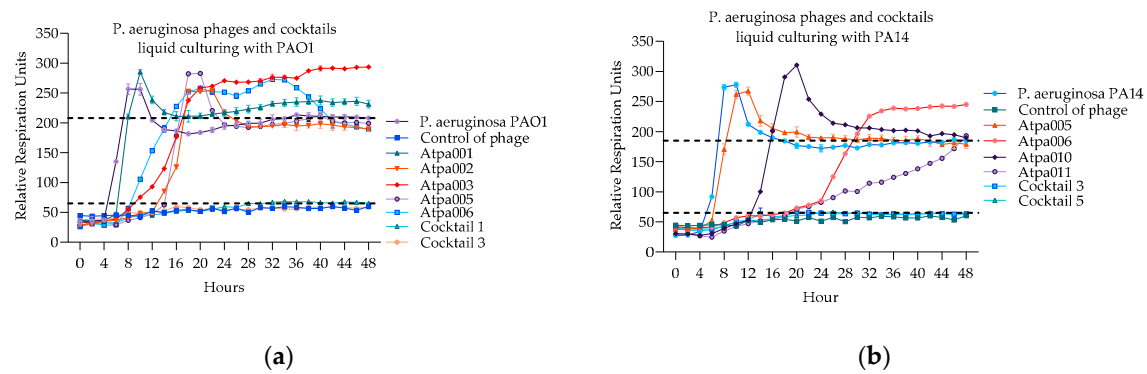


Figure S55. (a) the lytic activity curves of *P. aeruginosa* phage’s Atpa001-Atpa003 and cocktails 1, 5 on A11; (b) the lytic activity curves of *P. aeruginosa* phage’s Atpa012-Atpa014, Qatpa008-Qatpa010 and cocktails 6-7 on Is573.

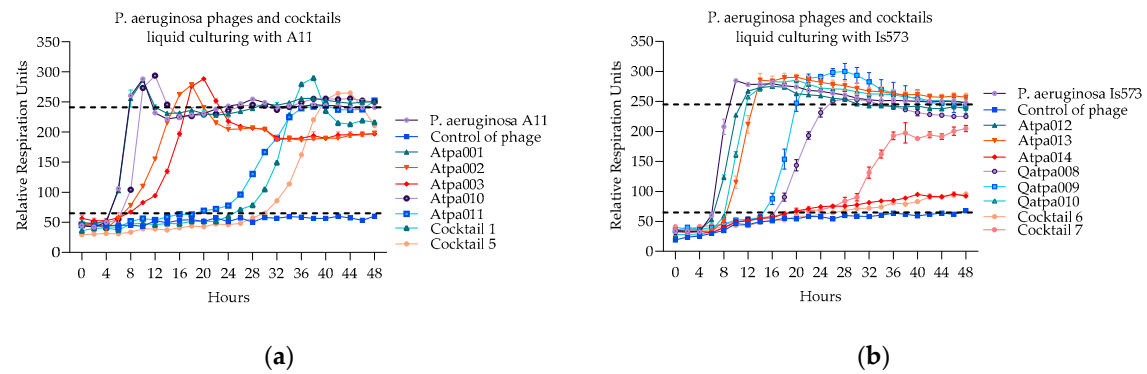
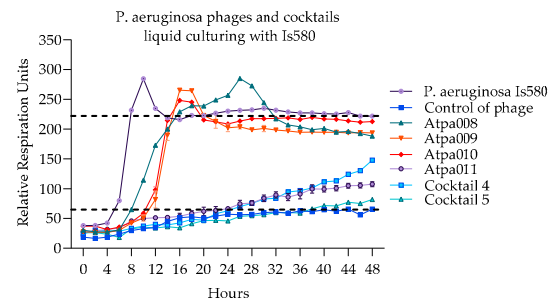
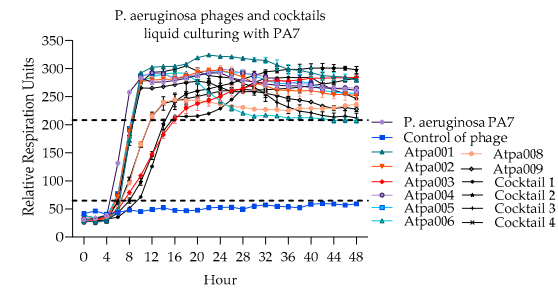


Figure S56. (a) the lytic activity curves of *P. aeruginosa* phage’s Atpa008-Atpa011 and cocktails 4-5 on Is580; (b) the lytic activity curves of *P. aeruginosa* phage’s Atpa001-Atpa009 and cocktails 1-4 cocktails 5-7 on PA7.

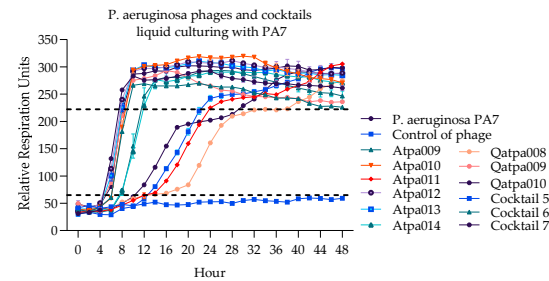


(a)

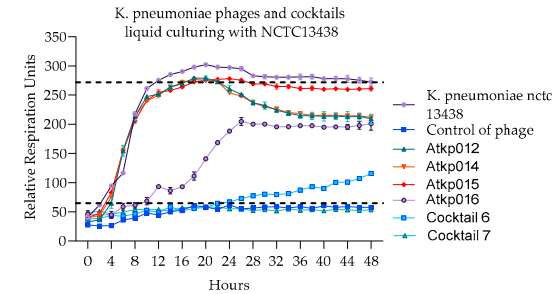


(b)

Figure S57. (a) the lytic activity curves of *P. aeruginosa* phage's Atpa009-Atpa014, Qatpa008-Qatpa010 and cocktails 6-7 on PA7 ; (b) the lytic activity curves of *K. pneumoniae* phage's Atpk012-Atpk016 and cocktails 6-7 on nctc13438 curves.



(a)



(b)

Figure S58. (a) the lytic activity curves of *P. aeruginosa* phage's Atpa009-Atpa014, Qatpa008-Qatpa010 and cocktails 6-7 on PA7 ; (b) the lytic activity curves of *K. pneumoniae* phage's Atpk012-Atpk016 and cocktails 6-7 on nctc13438 curves.

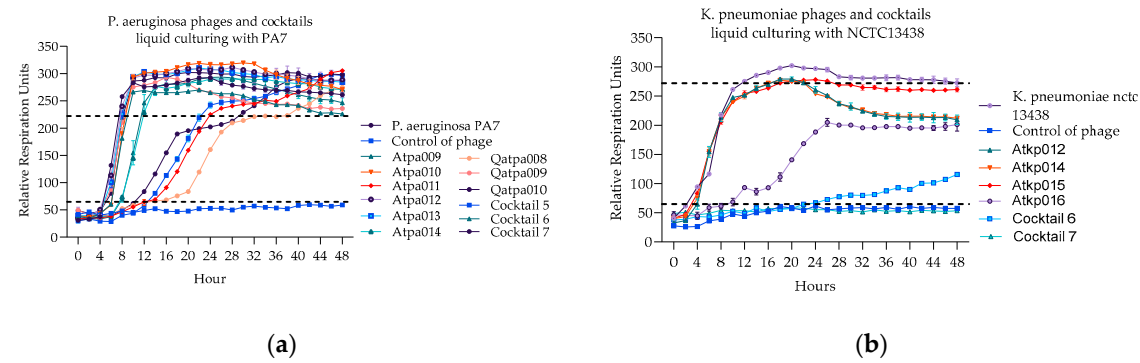


Figure S59. (a) the lytic activity curves of *K. pneumoniae* Atkp012-Atkp016 and cocktails 6-7 on SB4385; (b) the lytic activity curves of *K. pneumoniae* phage's Atkp012-Atkp016 and cocktails 6-7 on 10394 curves.

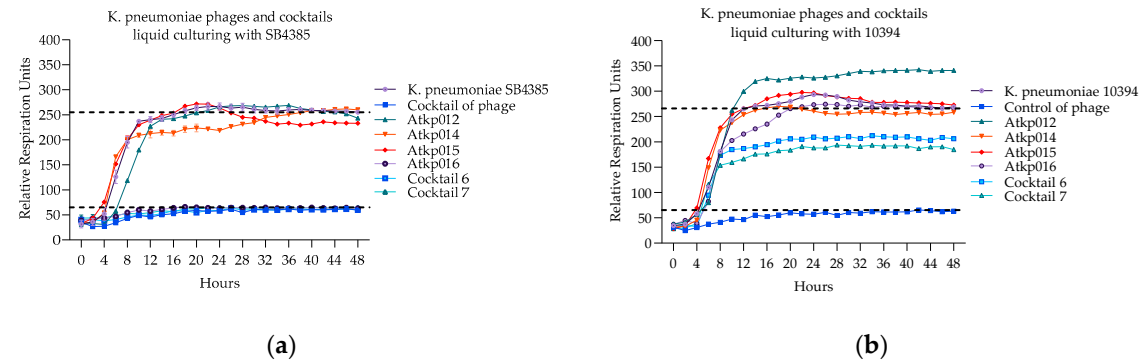


Figure S60. (a) the lytic activity curves of *K. pneumoniae* Atkp012-Atkp016 and cocktails 6-7 on VKPKP389. (b) the lytic activity curves of *K. pneumoniae* phage's Atkp001-Atkp009 and cocktails 1-4 on 70165.

