

PanViTa - Pan Virulence and resisTance Analysis

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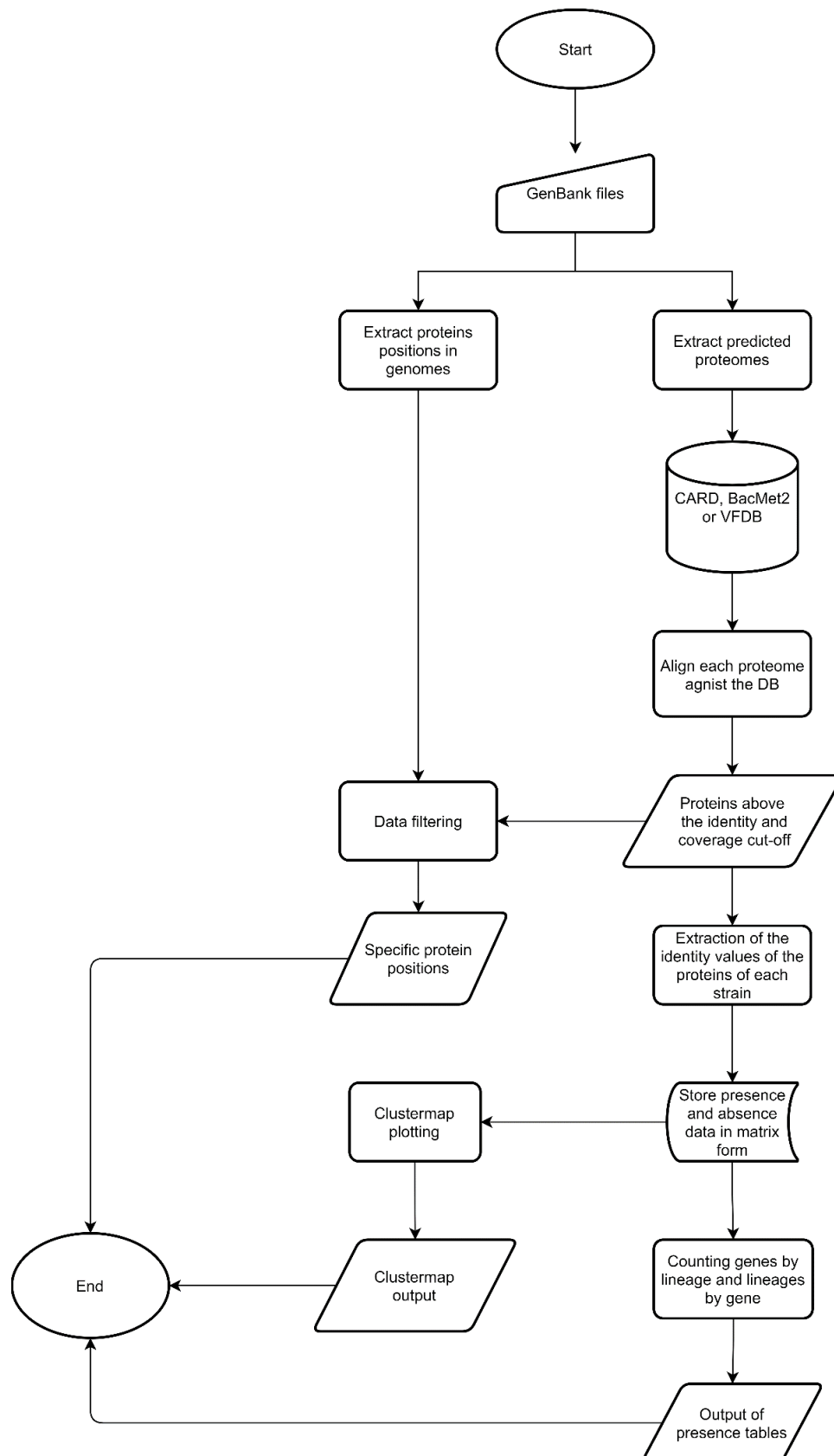
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Supplementary Material

Summary

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The following figure represents the flow of steps necessary for developing the activity proposed by the tool.



Supplementary Figure 1. Overview of PanViTa pipeline

The following table shows the access data for the genomes used for the comparative performance analysis of the PanViTa tool.

Supplementary Table 1. Summary of public genomes used in tool performance analysis.

Species	Strain	Assembly	Size(Mb)
<i>Acinetobacter baumannii</i>	3207	GCA_001636235.1	4.0920
<i>Acinetobacter baumannii</i>	5845	GCA_003522885.1	3.9900
<i>Acinetobacter baumannii</i>	6200	GCA_000814345.1	4.0740
<i>Acinetobacter baumannii</i>	6507	GCA_009455505.1	4.0921
<i>Acinetobacter baumannii</i>	7804	GCA_003431385.1	4.3420
<i>Acinetobacter baumannii</i>	7835	GCA_009497995.1	4.0958
<i>Acinetobacter baumannii</i>	7847	GCA_003516005.1	4.0806
<i>Acinetobacter baumannii</i>	9102	GCA_003522845.1	4.0668
<i>Acinetobacter baumannii</i>	9201	GCA_003522665.1	4.1282
<i>Acinetobacter baumannii</i>	10042	GCA_003522785.1	4.1519
<i>Acinetobacter baumannii</i>	10324	GCA_003522705.1	3.8624
<i>Acinetobacter baumannii</i>	09A16CRGN0014	GCA_003931755.1	3.9433
<i>Acinetobacter baumannii</i>	09A16CRGN003B	GCA_003931775.1	3.9431
<i>Acinetobacter baumannii</i>	11A1213CRGN008	GCA_004101745.1	3.9449
<i>Acinetobacter baumannii</i>	11A1213CRGN055	GCA_004101725.1	3.9341
<i>Acinetobacter baumannii</i>	11A1213CRGN064	GCA_008244865.1	3.9353
<i>Acinetobacter baumannii</i>	11A1314CRGN088	GCA_008244905.1	3.9351
<i>Acinetobacter baumannii</i>	11A1314CRGN088	GCA_004101685.1	3.9375
<i>Acinetobacter baumannii</i>	11A14CRGN003	GCA_004101705.1	3.9407
<i>Acinetobacter baumannii</i>	11W359501	GCA_006385075.1	4.1302
<i>Acinetobacter baumannii</i>	15A34	GCA_002082685.1	3.9387
<i>Acinetobacter baumannii</i>	15A5	GCA_002082705.1	4.0493
<i>Acinetobacter baumannii</i>	1656-2	GCA_000188215.1	4.0231
<i>Acinetobacter baumannii</i>	2008S11-069	GCA_003359255.2	4.1101
<i>Acinetobacter baumannii</i>	29FS20	GCA_013394285.1	4.1333
<i>Acinetobacter baumannii</i>	31FS3-2	GCA_013394265.1	3.9312
<i>Acinetobacter baumannii</i>	810CP	GCA_003345235.1	4.1111
<i>Acinetobacter baumannii</i>	A1	GCA_000830055.1	3.9177
<i>Acinetobacter baumannii</i>	A1296	GCA_002504145.1	3.8107
<i>Acinetobacter baumannii</i>	A1429	GCA_013377175.1	4.1619
<i>Acinetobacter baumannii</i>	A320_RUH134	GCA_007221455.1	3.8965
<i>Acinetobacter baumannii</i>	A388	GCA_002741415.1	4.0321
<i>Acinetobacter baumannii</i>	A52	GCA_004028375.1	4.0233
<i>Acinetobacter baumannii</i>	A85	GCA_002210065.1	4.1446
<i>Acinetobacter baumannii</i>	AB0057	GCA_000021245.2	4.0639
<i>Acinetobacter baumannii</i>	AB030	GCA_000746645.1	4.3358
<i>Acinetobacter baumannii</i>	AB031	GCA_000746605.1	3.8033
<i>Acinetobacter baumannii</i>	AB042	GCA_001941765.1	4.0047
<i>Acinetobacter baumannii</i>	AB043	GCA_008630895.1	3.9617
<i>Acinetobacter baumannii</i>	Ab04-mff	GCA_001077655.1	4.1923

<i>Acinetobacter baumannii</i>	AB307-0294	GCA_002803025.2	3.7595
<i>Acinetobacter baumannii</i>	AB34299	GCA_002009115.1	3.9830
<i>Acinetobacter baumannii</i>	Ab4568	GCA_002762115.1	4.0005
<i>Acinetobacter baumannii</i>	Ab4653	GCA_002762155.1	3.9139
<i>Acinetobacter baumannii</i>	Ab4977	GCA_002762095.1	3.9669
<i>Acinetobacter baumannii</i>	AB5075-UW	GCA_000963815.1	4.0670
<i>Acinetobacter baumannii</i>	ab736	GCA_002116925.1	3.9904
<i>Acinetobacter baumannii</i>	Aba	GCA_003288775.1	3.9205
<i>Acinetobacter baumannii</i>	Ab-B004d-c	GCA_012931645.1	4.1591
<i>Acinetobacter baumannii</i>	Ab-C102	GCA_012931605.1	3.9401
<i>Acinetobacter baumannii</i>	Ab-C63	GCA_012931665.1	3.9659
<i>Acinetobacter baumannii</i>	AbCAN2	GCA_009833005.1	3.8098
<i>Acinetobacter baumannii</i>	ABCR01	GCA_009498335.1	4.0304
<i>Acinetobacter baumannii</i>	Ab-D10a-a	GCA_012931625.1	4.1747
<i>Acinetobacter baumannii</i>	ABF9692	GCA_012974585.1	4.1268
<i>Acinetobacter baumannii</i>	AbH12O-A2	GCA_000761175.1	3.8758
<i>Acinetobacter baumannii</i>	ABNIH28	GCA_002902885.1	4.0788
<i>Acinetobacter baumannii</i>	AbPK1	GCA_002753915.1	4.1473
<i>Acinetobacter baumannii</i>	ABUH763	GCA_001674475.2	4.0145
<i>Acinetobacter baumannii</i>	ABUH773	GCA_001668465.2	3.8857
<i>Acinetobacter baumannii</i>	ABUH793	GCA_001669145.2	4.1079
<i>Acinetobacter baumannii</i>	ABUH796	GCA_001674505.2	3.9438
<i>Acinetobacter baumannii</i>	AC29	GCA_000695855.3	3.9351
<i>Acinetobacter baumannii</i>	AC30	GCA_000307975.2	3.9229
<i>Acinetobacter baumannii</i>	ACICU	GCA_005519135.1	4.0136
<i>Acinetobacter baumannii</i>	ACN21	GCA_004768705.1	4.0456
<i>Acinetobacter baumannii</i>	AF-401	GCA_001896005.1	4.2676
<i>Acinetobacter baumannii</i>	AF-673	GCA_001895985.1	4.0931
<i>Acinetobacter baumannii</i>	AR_0052	GCA_003547115.1	4.2889
<i>Acinetobacter baumannii</i>	AR_0056	GCA_002947415.1	4.1884
<i>Acinetobacter baumannii</i>	AR_0063	GCA_002947845.1	4.1018
<i>Acinetobacter baumannii</i>	AR_0070	GCA_003431865.1	4.3173
<i>Acinetobacter baumannii</i>	AR_0078	GCA_002948925.1	3.8719
<i>Acinetobacter baumannii</i>	AR_0083	GCA_002996805.1	4.1582
<i>Acinetobacter baumannii</i>	AR_0088	GCA_003006035.1	4.2283
<i>Acinetobacter baumannii</i>	AR_0101	GCA_003010675.1	4.2499
<i>Acinetobacter baumannii</i>	AR_0102	GCA_003010655.1	4.0603
<i>Acinetobacter baumannii</i>	ATCC_17978	GCA_013372085.1	4.0301
<i>Acinetobacter baumannii</i>	ATCC_17978_substr._PMR-High	GCA_004797155.2	4.0163
<i>Acinetobacter baumannii</i>	ATCC_17978-mff	GCA_001077675.1	4.0067
<i>Acinetobacter baumannii</i>	ATCC_19606	GCA_009759685.1	3.9904
<i>Acinetobacter baumannii</i>	ATCC_BAA-1790	GCA_008033255.1	4.0303
<i>Acinetobacter baumannii</i>	AYE	GCA_000069245.1	4.0487
<i>Acinetobacter baumannii</i>	AYP-A2	GCA_002761575.1	4.1027
<i>Acinetobacter baumannii</i>	B8300	GCA_001077965.2	3.8501

<i>Acinetobacter baumannii</i>	B8342	GCA_001077555.2	3.9478
<i>Acinetobacter baumannii</i>	BAL062	GCA_900088705.1	4.0508
<i>Acinetobacter baumannii</i>	BJAB07104	GCA_000419385.1	4.0422
<i>Acinetobacter baumannii</i>	BJAB0715	GCA_000419405.1	4.0539
<i>Acinetobacter baumannii</i>	BJAB0868	GCA_000419425.1	4.0058
<i>Acinetobacter baumannii</i>	C25	GCA_008807055.1	4.0294
<i>Acinetobacter baumannii</i>	CA-17	GCA_001721705.1	3.7193
<i>Acinetobacter baumannii</i>	CAM180-1	GCA_008802935.1	3.9232
<i>Acinetobacter baumannii</i>	CBA7	GCA_002082645.1	4.1085
<i>Acinetobacter baumannii</i>	CIAT758	GCA_004758865.1	4.1724
<i>Acinetobacter baumannii</i>	CIP70.10	GCA_001457535.1	3.9363
<i>Acinetobacter baumannii</i>	CMC-CR-MDR-Ab4	GCA_001922205.1	4.1560
<i>Acinetobacter baumannii</i>	CMC-CR-MDR-Ab66	GCA_001922245.1	4.1742
<i>Acinetobacter baumannii</i>	CMC-MDR-Ab59	GCA_001922225.1	4.0764
<i>Acinetobacter baumannii</i>	CUVET-MIC596	GCA_012974845.1	4.0804
<i>Pseudomonas aeruginosa</i>	NCTC10332	GCA_001457615.1	6.32
<i>Pseudomonas aeruginosa</i>	PAC1	GCA_013201115.1	7.56
<i>Pseudomonas aeruginosa</i>	Carb01 63	GCA_000981825.1	7.5
<i>Pseudomonas aeruginosa</i>	Pa1207	GCA_002208645.1	7.41
<i>Pseudomonas aeruginosa</i>	RIVM-EMC2982	GCA_002085605.1	7.38
<i>Pseudomonas aeruginosa</i>	1811-13R031	GCA_009676765.1	7.34
<i>Pseudomonas aeruginosa</i>	1811-18R001	GCA_009676785.1	7.34
<i>Pseudomonas aeruginosa</i>	F30658	GCA_001516265.1	7.27
<i>Pseudomonas aeruginosa</i>	AR442	GCA_003073795.1	7.27
<i>Pseudomonas aeruginosa</i>	Pa58	GCA_002192495.1	7.24
<i>Pseudomonas aeruginosa</i>	AR_0353	GCA_002968655.1	7.28
<i>Pseudomonas aeruginosa</i>	1	GCA_900497025.1	7.23
<i>Pseudomonas aeruginosa</i>	AG1	GCA_009662315.1	7.19
<i>Pseudomonas aeruginosa</i>	YTSEY8	GCA_016745115.1	7.18
<i>Pseudomonas aeruginosa</i>	AR_0357	GCA_002968955.1	7.16
<i>Pseudomonas aeruginosa</i>	SE5458	GCA_013394475.2	7.16
<i>Pseudomonas aeruginosa</i>	TJ2019-022	GCA_016105505.1	7.16
<i>Pseudomonas aeruginosa</i>	SE5369	GCA_013393685.1	7.15
<i>Pseudomonas aeruginosa</i>	Pa127	GCA_002205355.1	7.15
<i>Pseudomonas aeruginosa</i>	AR439	GCA_003073895.1	7.58
<i>Pseudomonas aeruginosa</i>	AR445	GCA_003073735.1	7.13
<i>Pseudomonas aeruginosa</i>	FDAARGOS_570	GCA_003813025.1	7.16
<i>Pseudomonas aeruginosa</i>	Y82	GCA_003369755.1	7.11
<i>Pseudomonas aeruginosa</i>	SE5429	GCA_016745175.1	7.1
<i>Pseudomonas aeruginosa</i>	24Pae112	GCA_003433235.1	7.1
<i>Pseudomonas aeruginosa</i>	401853	GCA_014155905.1	7.09
<i>Pseudomonas aeruginosa</i>	NCGM257	GCA_001547955.1	7.09
<i>Pseudomonas aeruginosa</i>	A-I-1	GCA_015697665.1	7.09
<i>Pseudomonas aeruginosa</i>	H26027	GCA_003798105.1	7.08
<i>Pseudomonas aeruginosa</i>	SE5331	GCA_013393665.2	7.06

<i>Pseudomonas aeruginosa</i>	MRSN12280	GCA_003028335.1	7.05
<i>Pseudomonas aeruginosa</i>	Pa1242	GCA_002205375.1	7.05
<i>Pseudomonas aeruginosa</i>	RW109	GCA_900243355.1	7.76
<i>Pseudomonas aeruginosa</i>	IMP-13	GCA_003950015.1	7.18
<i>Pseudomonas aeruginosa</i>	CMC-097	GCA_016064595.1	7.04
<i>Pseudomonas aeruginosa</i>	SE5357	GCA_016745155.1	7.04
<i>Pseudomonas aeruginosa</i>	E6130952	GCA_002085755.1	7.08
<i>Pseudomonas aeruginosa</i>	K34-7	GCA_003206535.1	7.04
<i>Pseudomonas aeruginosa</i>	268	GCA_003641125.1	7.03
<i>Pseudomonas aeruginosa</i>	FDAARGOS_505	GCA_003813005.1	7.03
<i>Pseudomonas aeruginosa</i>	BAMCPA07-48	GCA_001632245.1	7.02
<i>Pseudomonas aeruginosa</i>	PA7790	GCA_001870265.1	7.07
<i>Pseudomonas aeruginosa</i>	P33	GCA_015832055.1	7.12
<i>Pseudomonas aeruginosa</i>	AR_0230	GCA_002968695.1	7.09
<i>Pseudomonas aeruginosa</i>	CCUG 51971	GCA_008195485.1	7.01
<i>Pseudomonas aeruginosa</i>	Pa124	GCA_002192475.1	7.01
<i>Pseudomonas aeruginosa</i>	PA11803	GCA_001792875.1	7.01
<i>Pseudomonas aeruginosa</i>	SP4527	GCA_003991465.1	7.01
<i>Pseudomonas aeruginosa</i>	FDAARGOS_571	GCA_003812885.1	7
<i>Pseudomonas aeruginosa</i>	PASGNDM699	GCA_002104595.1	6.99
<i>Escherichia coli</i>	RM10386	GCA_003112225.1	5.96779
<i>Escherichia coli</i>	FRIK944	GCA_001695515.1	5.8662
<i>Escherichia coli</i>	E2865	GCA_003966465.1	6.00792
<i>Escherichia coli</i>	FRIK2455	GCA_001651965.2	5.77552
<i>Escherichia coli</i>	FRIK2069	GCA_001651925.2	5.74083
<i>Escherichia coli</i>	RM8385	GCA_003112165.1	5.73281
<i>Escherichia coli</i>	JEONG-1266	GCA_001558995.2	5.57459
<i>Escherichia coli</i>	E2855	GCA_003966425.1	5.93508
<i>Escherichia coli</i>	C11	GCA_001900355.1	5.41457
<i>Escherichia coli</i>	RM9872	GCA_003586065.1	5.47544
<i>Escherichia coli</i>	E2863	GCA_003966445.1	5.75166
<i>Escherichia coli</i>	C3	GCA_001900515.1	5.41327
<i>Escherichia coli</i>	C5	GCA_001900535.1	5.63396
<i>Escherichia coli</i>	C7	GCA_001901425.1	5.37241
<i>Escherichia coli</i>	RM9131	GCA_003288295.1	5.43269
<i>Escherichia coli</i>	RM9975	GCA_003288275.1	5.43242
<i>Escherichia coli</i>	1517k	GCA_004377995.2	5.16434
<i>Escherichia coli</i>	64.1	GCA_014170675.1	5.487
<i>Escherichia coli</i>	144	GCA_002310595.1	5.36125
<i>Escherichia coli</i>	CFS3292	GCA_009867015.2	5.55817
<i>Escherichia coli</i>	CFS3273	GCA_009866945.1	5.53688
<i>Escherichia coli</i>	MRY15-117	GCA_002357895.1	5.29507
<i>Escherichia coli</i>	730V1	GCA_014771275.1	5.218
<i>Escherichia coli</i>	181.1	GCA_014170615.1	5.5179
<i>Escherichia coli</i>	746	GCA_002310655.1	5.31928

<i>Escherichia coli</i>	1105	GCA_002310635.1	5.13375
<i>Escherichia coli</i>	RM10042	GCA_003112205.1	5.26171
<i>Escherichia coli</i>	RM10466	GCA_003176855.1	5.27288
<i>Escherichia coli</i>	MRY15-131	GCA_002357875.1	5.21995
<i>Escherichia coli</i>	317	GCA_002310575.1	5.13591
<i>Escherichia coli</i>	C10	GCA_001900335.1	5.02169
<i>Escherichia coli</i>	2014-01-7375	GCA_904711265.1	5.27047
<i>Escherichia coli</i>	C4	GCA_001900315.1	4.99048
<i>Escherichia coli</i>	1428	GCA_002310695.1	5.30974
<i>Escherichia coli</i>	1303	GCA_000829985.1	5.15693
<i>Escherichia coli</i>	CFS3313	GCA_009867035.1	5.23538
<i>Escherichia coli</i>	PSUO2	GCA_002215095.1	5.03526
<i>Escherichia coli</i>	C8	GCA_001900555.1	5.09612
<i>Escherichia coli</i>	1190	GCA_002310615.1	4.98704
<i>Escherichia coli</i>	268.2	GCA_014170975.1	5.07345
<i>Escherichia coli</i>	3R	GCA_011067085.1	5.27296
<i>Escherichia coli</i>	ECOL-18-VL-LA-PA-Ryan-0026	GCA_007012305.1	5.13531
<i>Escherichia coli</i>	AMSCJX04	GCA_013389615.1	5.31111
<i>Escherichia coli</i>	C1	GCA_001900295.1	4.84302
<i>Escherichia coli</i>	PT109	GCA_009761715.1	4.99434
<i>Escherichia coli</i>	C2	GCA_001900495.1	4.81824
<i>Escherichia coli</i>	ECC-1470	GCA_000831565.1	4.90381
<i>Escherichia coli</i>	CFS3246	GCA_009866925.1	4.99515
<i>Escherichia coli</i>	873.1	GCA_014770895.1	5.2934
<i>Escherichia coli</i>	97.3	GCA_014771055.1	5.1357
<i>Escherichia coli</i>	SC516	GCA_002812545.1	4.7924
<i>Escherichia coli</i>	1943	GCA_002310555.1	5.00072
<i>Escherichia coli</i>	1223	GCA_002310715.1	4.95157
<i>Escherichia coli</i>	127	GCA_002310675.1	5.09128
<i>Escherichia coli</i>	1283	GCA_002310735.1	4.92005
<i>Escherichia coli</i>	54	GCA_012278675.1	4.77038
<i>Escherichia coli</i>	AMSCJX03	GCA_013391825.1	4.81981
<i>Escherichia coli</i>	YY76-1	GCA_008080655.1	4.81566
<i>Escherichia coli</i>	C9	GCA_001900575.1	4.67746
<i>Escherichia coli</i>	276.2	GCA_014170595.1	5.32583
<i>Escherichia coli</i>	56.2	GCA_014170695.1	5.30872
<i>Escherichia coli</i>	PSUO78	GCA_002215115.1	5.23057
<i>Escherichia coli</i>	34.1	GCA_014170715.1	4.97826
<i>Escherichia coli</i>	162.2	GCA_014170735.1	4.75087
<i>Escherichia coli</i>	101.3	GCA_014170945.1	4.86155