

Supplement Figures

Comparative phylogenomic and phenotypic analysis highlights diversity of antibiotic resistance and virulence in *Acinetobacter baumannii*

Figure 1b – AdeN AA1-105

Accession	Sequence	Position
AB052-MST-SNC-8	MHDPVLESHHLVCEKPQTRRCIERRLALLLSATELFLEKGYDAVSLDDIVNHAGGSKTSIYKYFGNKDGLFTAICDYRREMFFKDICIAFQPEQTSLKDYLIQTL	105
AB428-AcS20	MHDPVLESHHLVCEKPQTRRCIERRLALLLSATELFLEKGYDAVSLDDIVNHAGGSKTSIYKYFGNKDGLFTAICDYRREMFFKDICIAFQPEQTSLKDYLIQTL	105
AB422-MST-SNC-24	MHDPVLESHHLVCEKPQTRRCIERRLALLLSATELFLEKGYDAVSLDDIVNHAGGSKTSIYKYFGNKDGLFTAICDYRREMFFKDICIAFQPEQTSLKDYLIQTL	105
AB220-IK38	MHDPVLESHHLVCEKPQTRRCIERRLALLLSATELFLEKGYDAVSLDDIVNHAGGSKTSIYKYFGNKDGLFTAICDYRREMFFKDICIAFQPEQTSLKDYLIQTL	105
AB215-IK33	MHDPVLESHHLVCEKPQTRRCIERRLALLLSATELFLEKGYDAVSLDDIVNHAGGSKTSIYKYFGNKDGLFTAICDYRREMFFKDICIAFQPEQTSLKDYLIQTL	105
AB421-MST-SNC-9	MHDPVLESHHLVCEKPQTRRCIERRLALLLSATELFLEKGYDAVSLDDIVNHAGGSKTSIYKYFGNKDGLFTAICDYRREMFFKDICIAFQPEQTSLKDYLIQTL	105
AB046	MHDPVLESHHLVCEKPQTRRCIERRLALLLSATELFLEKGYDAVSLDDIVNHAGGSKTSIYKYFGNKDGLFTAICDYRREMFFKDICIAFQPEQTSLKDYLIQTL	105
AB338-IK12	MHDPVLESHHLVCEKPQTRRCIERRLALLLSATELFLEKGYDAVSLDDIVNHAGGSKTSIYKYFGNKDGLFTAICDYRREMFFKDICIAFQPEQTSLKDYLIQTL	105
AB341-IK15	MHDPVLESHHLVCEKPQTRRCIERRLALLLSATELFLEKGYDAVSLDDIVNHAGGSKTSIYKYFGNKDGLFTAICDYRREMFFKDICIAFQPEQTSLKDYLIQTL	105
AB345-IK19	MHDPVLESHHLVCEKPQTRRCIERRLALLLSATELFLEKGYDAVSLDDIVNHAGGSKTSIYKYFGNKDGLFTAICDYRREMFFKDICIAFQPEQTSLKDYLIQTL	105
AB351-IK26	MHDPVLESHHLVCEKPQTRRCIERRLALLLSATELFLEKGYDAVSLDDIVNHAGGSKTSIYKYFGNKDGLFTAICDYRREMFFKDICIAFQPEQTSLKDYLIQTL	105
AB354-IK29	MHDPVLESHHLVCEKPQTRRCIERRLALLLSATELFLEKGYDAVSLDDIVNHAGGSKTSIYKYFGNKDGLFTAICDYRREMFFKDICIAFQPEQTSLKDYLIQTL	105
AB224-IK42	MHDPVLESHHLVCEKPQTRRCIERRLALLLSATELFLEKGYDAVSLDDIVNHAGGSKTSIYKYFGNKDGLFTAICDYRREMFFKDICIAFQPEQTSLKDYLIQTL	105
AB424-AcS9	MHDPVLESHHLVCEKPQTRRCIERRLALLLSATELFLEKGYDAVSLDDIVNHAGGSKTSIYKYFGNKDGLFTAICDYRREMFFKDICIAFQPEQTSLKDYLIQTL	105
AB427-AcS19	MHDPVLESHHLVCEKPQTRRCIERRLALLLSATELFLEKGYDAVSLDDIVNHAGGSKTSIYKYFGNKDGLFTAICDYRREMFFKDICIAFQPEQTSLKDYLIQTL	105
ATCC17978	MHDPVLESHHLVCEKPQTRRCIERRLALLLSATELFLEKGYDAVSLDDIVNHAGGSKTSIYKYFGNKDGLFTAICDYRREMFFKDICIAFQPEQTSLKDYLIQTL	105
AB216-IK34	MHDPVLESHHLVCEKPQTRRCI.....YDAVSLDDIVNHAGGSKTSIYKYFGNKDGLFTAICDYRREMFFKDICIAFQPEQTSLKDYLIQTL	88
AB030	MHDPVLESHHLVCEKPQTRRCIERRLALLLSATELFLEKGYDAVSLDDIVNHAGGSKTSIYKYFGNKDGLFTAICDYRREMFFKDICIAFQPEQTSLKDYLIQTL	105
AB337-IK11	MHDPVLESHHLVCEKPQTRRCIERRLALLLSATELFLEKGYDAVSLDDIVNHAGGSKTSIYKYFGNKDGLFTAICDYRREMFFKDICIAFQPEQTSLKDYLIQTL	105
AB339-IK13	MHDPVLESHHLVCEKPQTRRCIERRLALLLSATELFLEKGYDAVSLDDIVNHAGGSKTSIYKYFGNKDGLFTAICDYRREMFFKDICIAFQPEQTSLKDYLIQTL	105
AB342-IK16	MHDPVLESHHLVCEKPQTRRCIERRLALLLSATELFLEKGYDAVSLDDIVNHAGGSKTSIYKYFGNKDGLFTAICDYRREMFFKDICIAFQPEQTSLKDYLIQTL	105
AB346-IK20	MHDPVLESHHLVCEKPQTRRCIERRLALLLSATELFLEKGYDAVSLDDIVNHAGGSKTSIYKYFGNKDGLFTAICDYRREMFFKDICIAFQPEQTSLKDYLIQTL	105
AB352-IK27	MHDPVLESHHLVCEKPQTRRCIERRLALLLSATELFLEKGYDAVSLDDIVNHAGGSKTSIYKYFGNKDGLFTAICDYRREMFFKDICIAFQPEQTSLKDYLIQTL	105
AB214-IK32	MHDPVLESHHLVCEKPQTRRCIERRLALLLSATELFLEKGYDAVSLDDIVNHAGGSKTSIYKYFGNKDGLFTAICDYRREMFFKDICIAFQPEQTSLKDYLIQTL	105
AB420-MST-SNC-5	MHDPVLESHHLVCEKPQTRRCIERRLALLLSATELFLEKGYDAVSLDDIVNHAGGSKTSIYKYFGNKDGLFTAICDYRREMFFKDICIAFQPEQTSLKDYLIQTL	105
AB425-AcS17	MHDPVLESHHLVCEKPQTRRCIERRLALLLSATELFLEKGYDAVSLDDIVNHAGGSKTSIYKYFGNKDGLFTAICDYRREMFFKDICIAFQPEQTSLKDYLIQTL	105
AB429-AcS27	MHDPVLESHHLVCEKPQTRRCIERRLALLLSATELFLEKGYDAVSLDDIVNHAGGSKTSIYKYFGNKDGLFTAICDYRREMFFKDICIAFQPEQTSLKDYLIQTL	105
AB426-AcS18	MHDPVLESHHLVCEKPQTRRCIERRLALLLSATELFLEKGYDAVSLDDIVNHAGGSKTSIYKYFGNKDGLFTAICDYRREMFFKDICIAFQPEQTSLKDYLIQTL	105
AB423-MST-SNC-253	MHDPVLESHHLVCEKPQTRRCIERRLALLLSATELFLEKGYDAVSLDDIVNHAGGSKTSIYKYFGNKDGLFTAICDYRREMFFKDICIAFQPEQTSLKDYLIQTL	105
AB218-IK36	MHDPVLESHHLVCEKPQTRRCIERRLALLLSATELFLEKGYDAVSLDDIVNHAGGSKTSIYKYFGNKDGLFTAICDYRREMFFKDICIAFQPEQTSLKDYLIQTL	105
AB353-IK28	MHDPVLESHHLVCEKPQTRRCIERRLALLLSATELFLEKGYDAVSLDDIVNHAGGSKTSIYKYFGNKDGLFTAICDYRREMFFKDICIAFQPEQTSLKDYLIQTL	105
AB347-IK21	MHDPVLESHHLVCEKPQTRRCIERRLALLLSATELFLEKGYDAVSLDDIVNHAGGSKTSIYKYFGNKDGLFTAICDYRREMFFKDICIAFQPEQTSLKDYLIQTL	105
AB343-IK17	MHDPVLESHHLVCEKPQTRRCIERRLALLLSATELFLEKGYDAVSLDDIVNHAGGSKTSIYKYFGNKDGLFTAICDYRREMFFKDICIAFQPEQTSLKDYLIQTL	105
AB340-IK14	MHDPVLESHHLVCEKPQTRRCIERRLALLLSATELFLEKGYDAVSLDDIVNHAGGSKTSIYKYFGNKDGLFTAICDYRREMFFKDICIAFQPEQTSLKDYLIQTL	105
AB219-IK37	MHDPVLESHHLVCEKQTRRCIERRLALLLSATELFLEKGYDAVSLDDIVNHAGGSKTSIYKYFGNKDGLFTAICDYRREMFFKDICIAFQPEQTSLKDYLIQTL	105
AB223-IK41	MHDPVLESHHLVCEKQTRRCIERRLALLLSATELFLEKGYDAVSLDDIVNHAGGSKTSIYKYFGNKDGLFTAICDYRREMFFKDICIAFQPEQTSLKDYLIQTL	105
consensus	!!!!!!!!!!!!!!!!!!!!*!!*!!!!!!!!!!!!!!!!!!!!	

Figure 2c – BaeR

AB219-IK37	EWIQAVYGVGYRLEYPEE	228
AB223-IK41	EWIQAVYGVGYRLEYPEE	228
AB426-AcS18	EWIQAVYGVGYRLEYPEE	228
AB428-AcS20	EWIQAVYGVGYRLEYPEE	228
AB214-IK32	EWIQAVYGVGYRFEYPEE	228
ATCC17978	EWIQAVYGVGYRFEYPEE	228
AB030	EWIQAVYGVGYRFEYPEE	228
AB046	EWIQAVYGVGYRFEYPEE	228
AB337-IK11	EWIQAVYGVGYRFEYPEE	228
AB338-IK12	EWIQAVYGVGYRFEYPEE	228
AB339-IK13	EWIQAVYGVGYRFEYPEE	228
AB340-IK14	EWIQAVYGVGYRFEYPEE	228
AB341-IK15	EWIQAVYGVGYRFEYPEE	228
AB342-IK16	EWIQAVYGVGYRFEYPEE	228
AB343-IK17	EWIQAVYGVGYRFEYPEE	228
AB345-IK19	EWIQAVYGVGYRFEYPEE	228
AB346-IK20	EWIQAVYGVGYRFEYPEE	228
AB347-IK21	EWIQAVYGVGYRFEYPEE	228
AB351-IK26	EWIQAVYGVGYRFEYPEE	228
AB352-IK27	EWIQAVYGVGYRFEYPEE	228
AB215-IK33	EWIQAVYGVGYRFEYPEE	228
AB216-IK34	EWIQAVYGVGYRFEYPEE	228
AB218-IK36	EWIQAVYGVGYRFEYPEE	228
AB220-IK38	EWIQAVYGVGYRFEYPEE	228
AB224-IK42	EWIQAVYGVGYRFEYPEE	228
AB420-MST-SNC-5	EWIQAVYGVGYRFEYPEE	228
AB052-MST-SNC-8	EWIQAVYGVGYRFEYPEE	228
AB421-MST-SNC-9	EWIQAVYGVGYRFEYPEE	228
AB422-MST-SNC-24	EWIQAVYGVGYRFEYPEE	228
AB423-MST-SNC-253	EWIQAVYGVGYRFEYPEE	228
AB424-AcS9	EWIQAVYGVGYRFEYPEE	228
AB425-AcS17	EWIQAVYGVGYRFEYPEE	228
AB427-AcS19	EWIQAVYGVGYRFEYPEE	228
AB429-AcS27	EWIQAVYGVGYRFEYPEE	228
AB353-IK28	EWIQAVYGVGYRLEYPEE	228
AB354-IK29	EWIQAVYGVGYRLEYPEE	228
consensus	!!!!!!!!!!!!*!!!!	

X non-conserved
X ≥ 50% conserved

Figure 4 – AdeL

ATCC17978	CDK X ETGHE X Y X T X IR X TL X VE X Q X HN X IAEAYTL X KT	343
AB030	196
AB046	CDK X ETGHE X Y X T X IR X TL X VE X Q X HN X IAEAYTL X KT	343
AB337-IK11	CDK X ETGHE X Y X T X IR X TL X VE X Q X HN X IAEAYTL X KT	343
AB338-IK12	CDK X ETGHE X Y X T X IR X TL X VE X Q X HN X IAEAYTL X KT	343
AB339-IK13	CDK X ETGHE X Y X T X IR X TL X VE X Q X HN X IAEAYTL X KT	343
AB340-IK14	CDK X ETGHE X Y X T X IR X TL X VE X Q X HN X IAEAYTL X KT	343
AB341-IK15	CDK X ETGHE X Y X T X IR X TL X VE X Q X HN X IAEAYTL X KT	343
AB342-IK16	CDK X ETGHE X Y X T X IR X TL X VE X Q X HN X IAEAYTL X KT	343
AB343-IK17	CDK X ETGHE X Y X T X IR X TL X VE X Q X HN X IAEAYTL X KT	343
AB345-IK19	CDK X ETGHE X Y X T X IR X TL X VE X Q X HN X IAEAYTL X KT	343
AB346-IK20	CDK X ETGHE X Y X T X IR X TL X VE X Q X HN X IAEAYTL X KT	343
AB347-IK21	CDK X ETGHE X Y X T X IR X TL X VE X Q X HN X IAEAYTL X KT	343
AB351-IK26	CDK X ETGHE X Y X T X IR X TL X VE X Q X HN X IAEAYTL X KT	343
AB352-IK27	CDK X ETGHE X Y X T X IR X TL X VE X Q X HN X IAEAYTL X KT	343
AB353-IK28	CDK X ETGHE X Y X T X IR X TL X VE X Q X HN X IAEAYTL X KT	343
AB354-IK29	CDK X ETGHE X Y X T X IR X TL X VE X Q X HN X IAEAYTL X KT	343
AB214-IK32	CDK X ETGHE X Y X T X IR X TL X VE X Q X HN X IAEAYTL X KT	343
AB215-IK33	CDK X ETGHE X Y X T X IR X TL X VE X Q X HN X IAEAYTL X KT	343
AB216-IK34	CDK X ETGHE X Y X T X IR X TL X VE X Q X HN X IAEAYTL X KT	343
AB218-IK36	CDK X ETGHE X Y X T X IR X TL X VE X Q X HN X IAEAYTL X KT	343
AB219-IK37	CDK X ETGHE X Y X T X IR X TL X VE X Q X HN X IAEAYTL X KT	343
AB220-IK38	CDK X ETGHE X Y X T X IR X TL X VE X Q X HN X IAEAYTL X KT	343
AB223-IK41	CDK X ETGHE X Y X T X IR X TL X VE X Q X HN X IAEAYTL X KT	343
AB224-IK42	CDK X ETGHE X Y X T X IR X TL X VE X Q X HN X IAEAYTL X KT	343
AB052-MST-SNC-8	CDK X ETGHE X Y X T X IR X TL X VE X Q X HN X IAEAYTL X KT	343
AB421-MST-SNC-9	CDK X ETGHE X Y X T X IR X TL X VE X Q X HN X IAEAYTL X KT	343
AB422-MST-SNC-24	CDK X ETGHE X Y X T X IR X TL X VE X Q X HN X IAEAYTL X KT	343
AB423-MST-SNC-253	CDK X ETGHE X Y X T X IR X TL X VE X Q X HN X IAEAYTL X KT	343
AB424-AcS9	CDK X ETGHE X Y X T X IR X TL X VE X Q X HN X IAEAYTL X KT	343
AB425-AcS17	CDK X ETGHE X Y X T X IR X TL X VE X Q X HN X IAEAYTL X KT	343
AB426-AcS18	CDK X ETGHE X Y X T X IR X TL X VE X Q X HN X IAEAYTL X KT	343
AB427-AcS19	CDK X ETGHE X Y X T X IR X TL X VE X Q X HN X IAEAYTL X KT	343
AB428-AcS20	CDK X ETGHE X Y X T X IR X TL X VE X Q X HN X IAEAYTL X KT	343
AB429-AcS27	CDK X ETGHE X Y X T X IR X TL X VE X Q X HN X IAEAYTL X KT	343
AB420-MST-SNC-5	CDK X ETGHE X Y X T X IR X TL X VE X Q X HN X IAEAYTL X KT	343
consensus	*****	

X non-conserved
X ≥ 50% conserved

Figure 4b – Motility – Tank milk

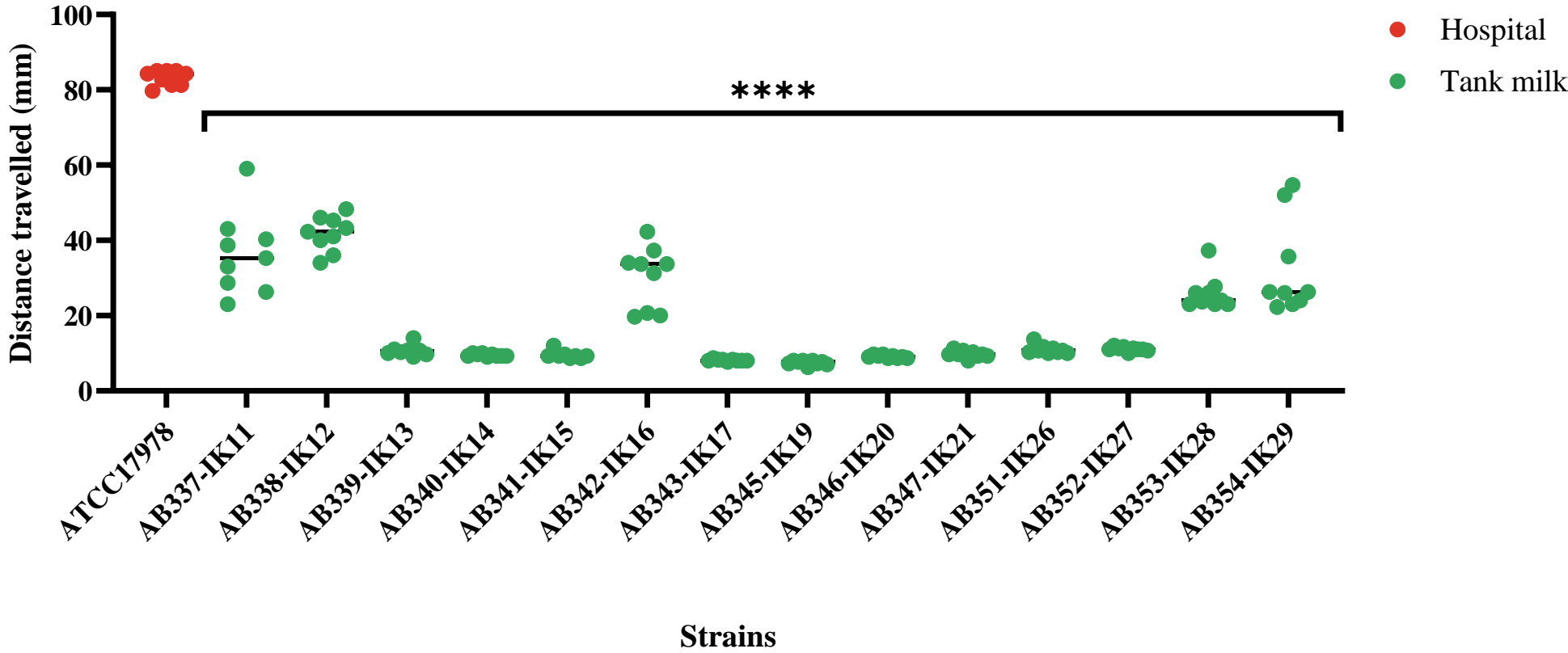


Figure 4c – Motility - Stream and WWE

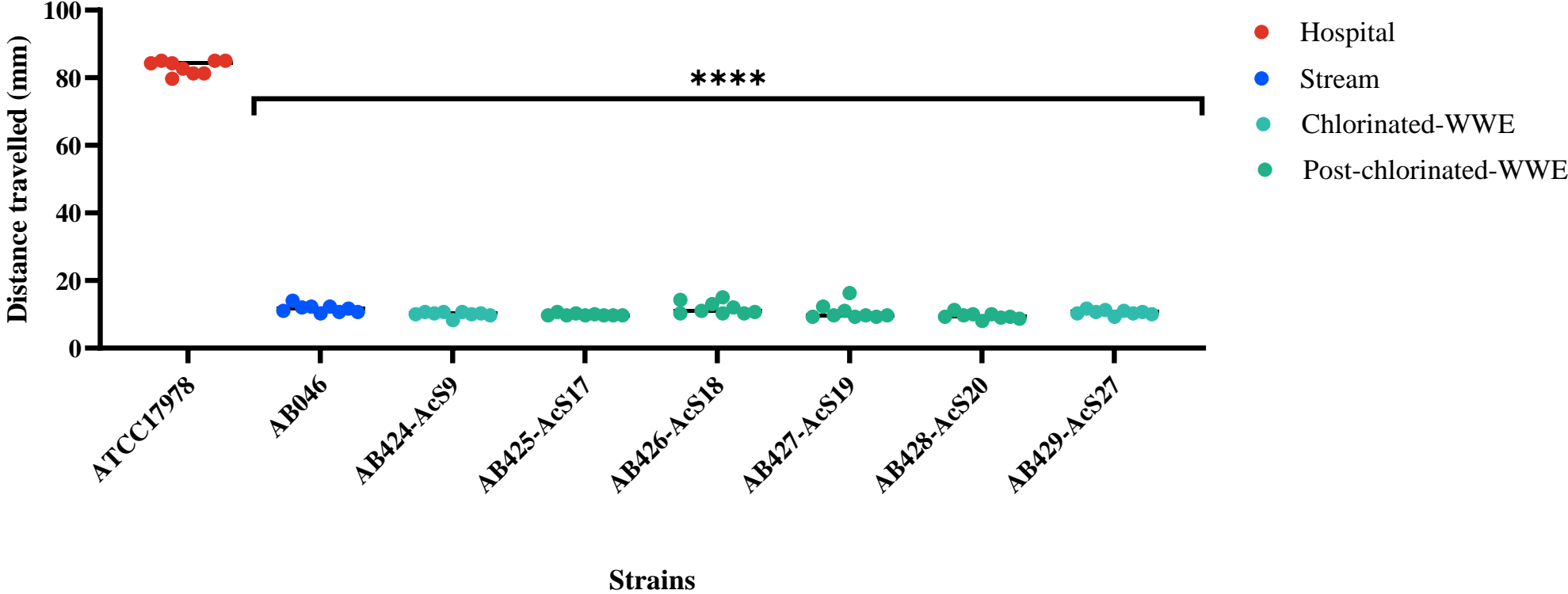


Figure 4d – Motility – Agricultural Surface Water

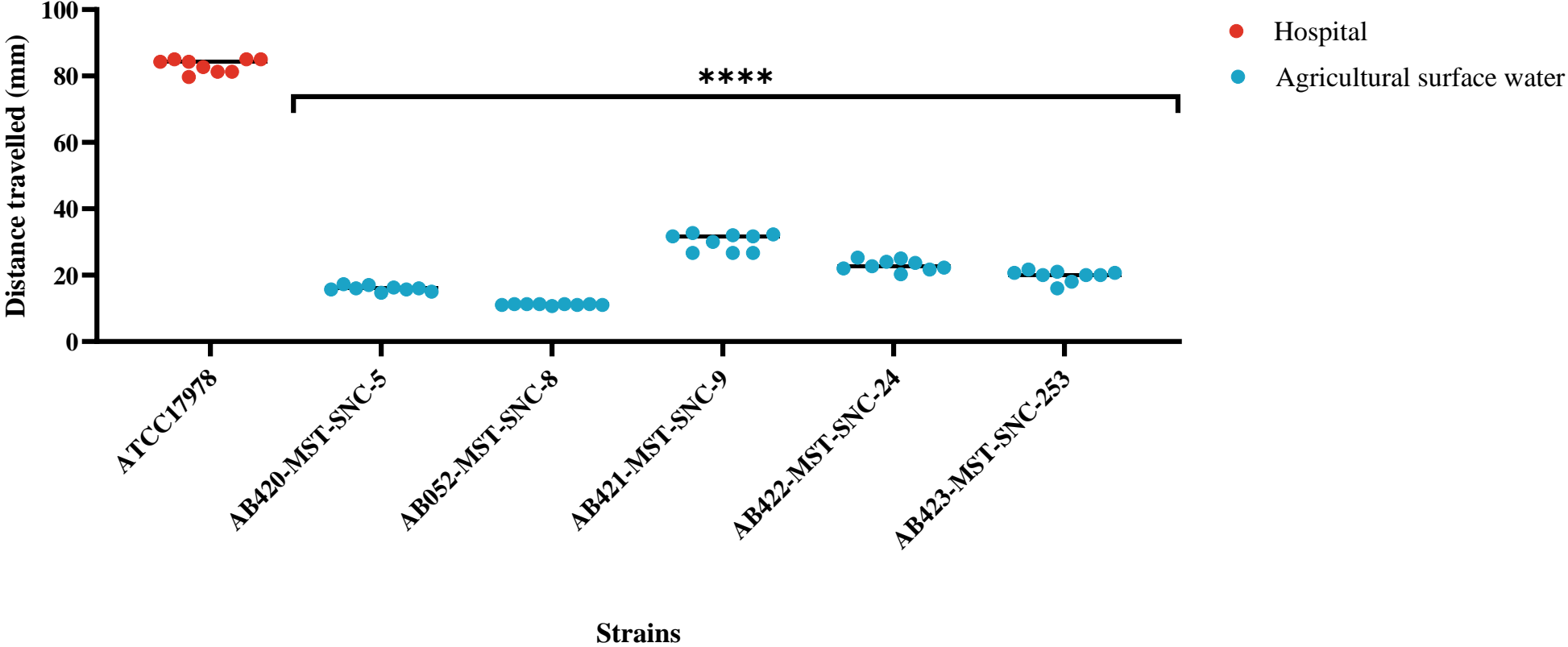


Figure 5a: Biofilm Formation - Hospital

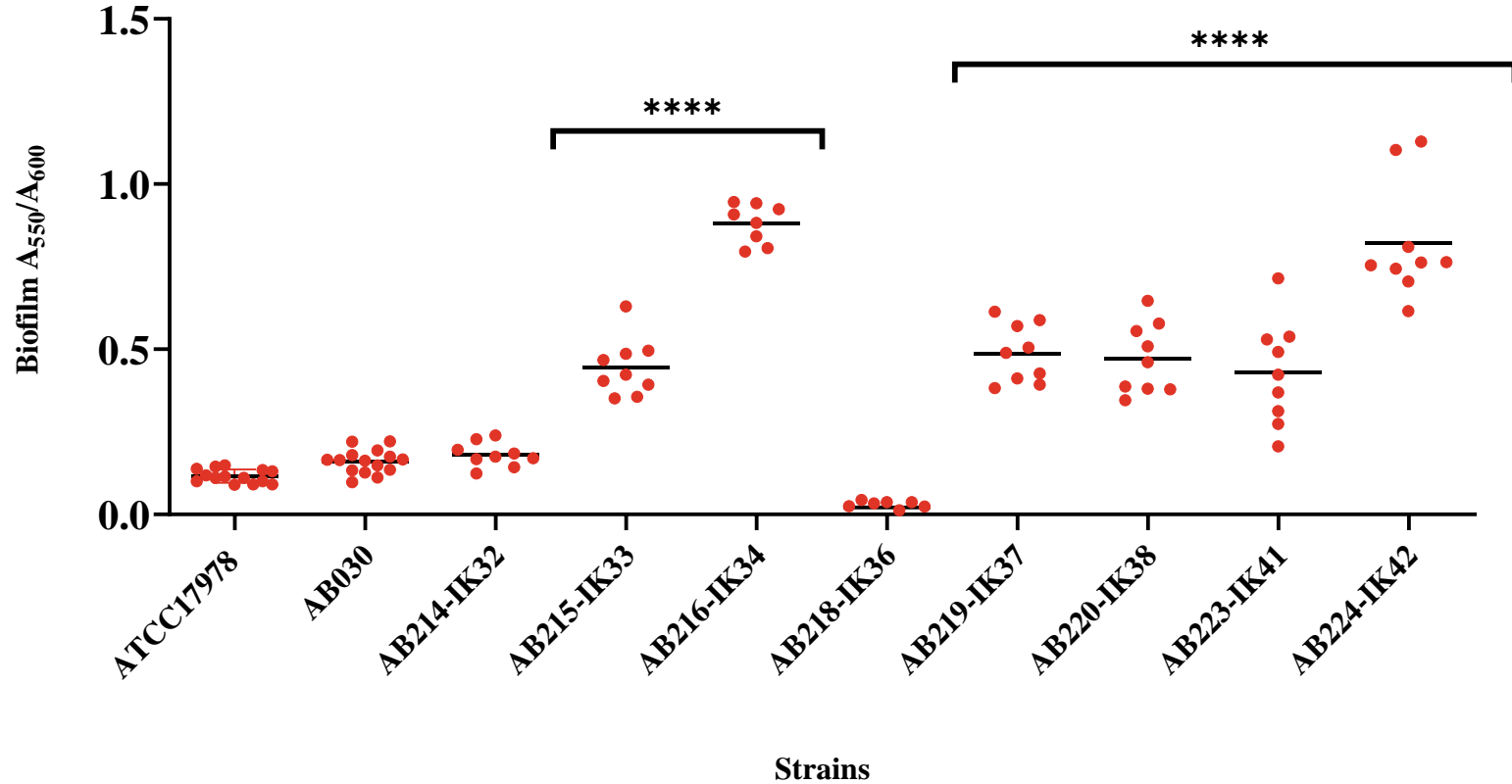


Figure 5b: Biofilm Formation – Tank milk

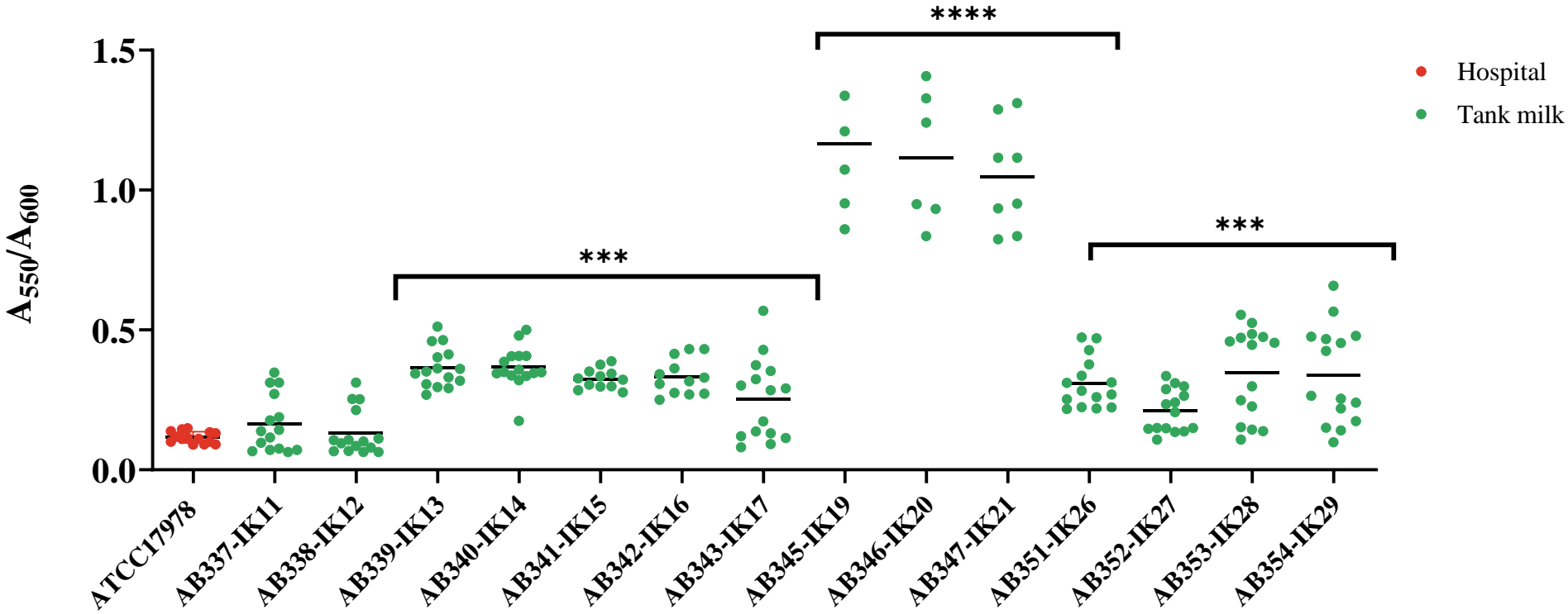


Figure 5c: Biofilm Formation – Stream and WWTP

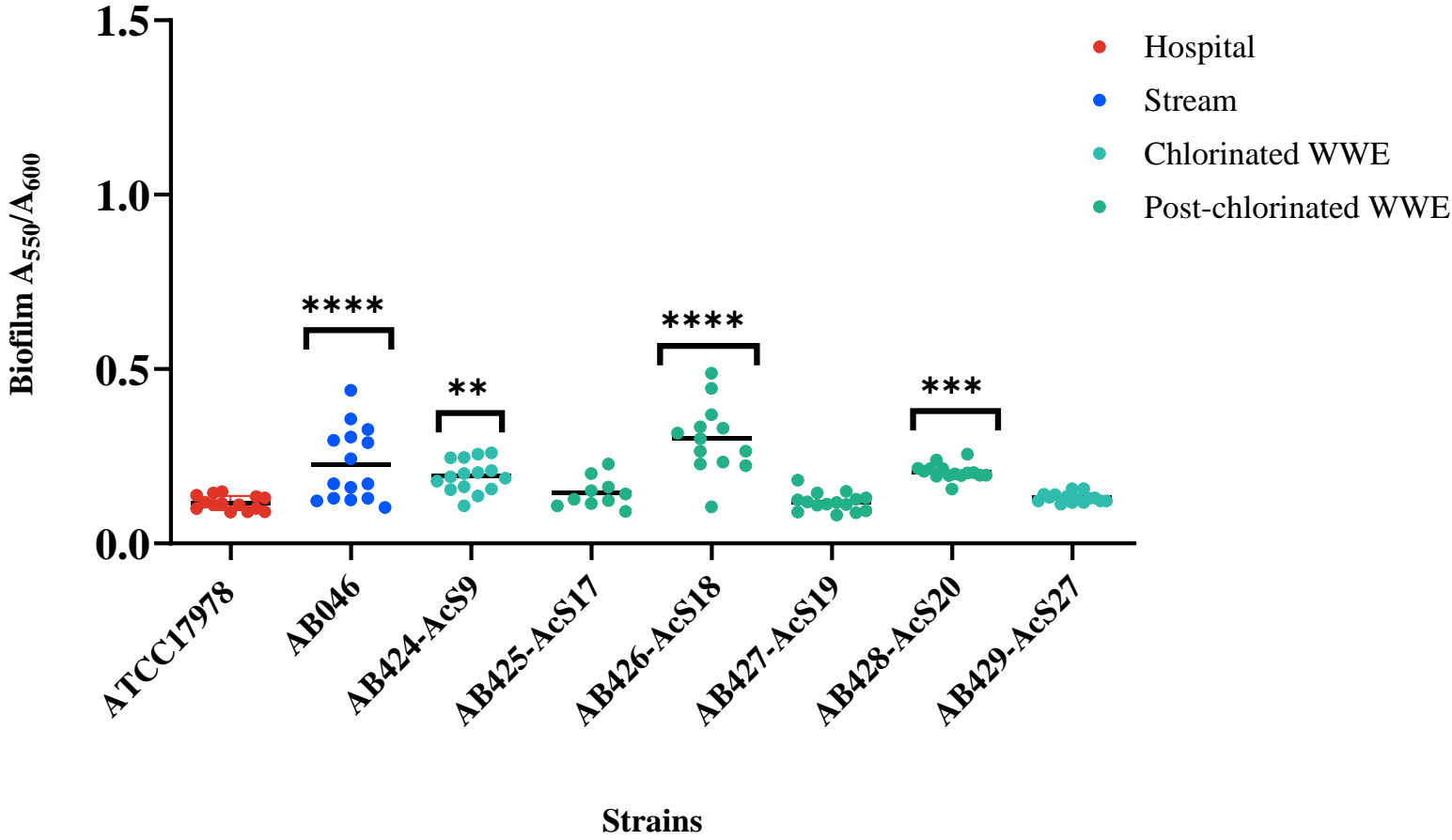


Figure 5d: Biofilm Formation – Agricultural Surface water

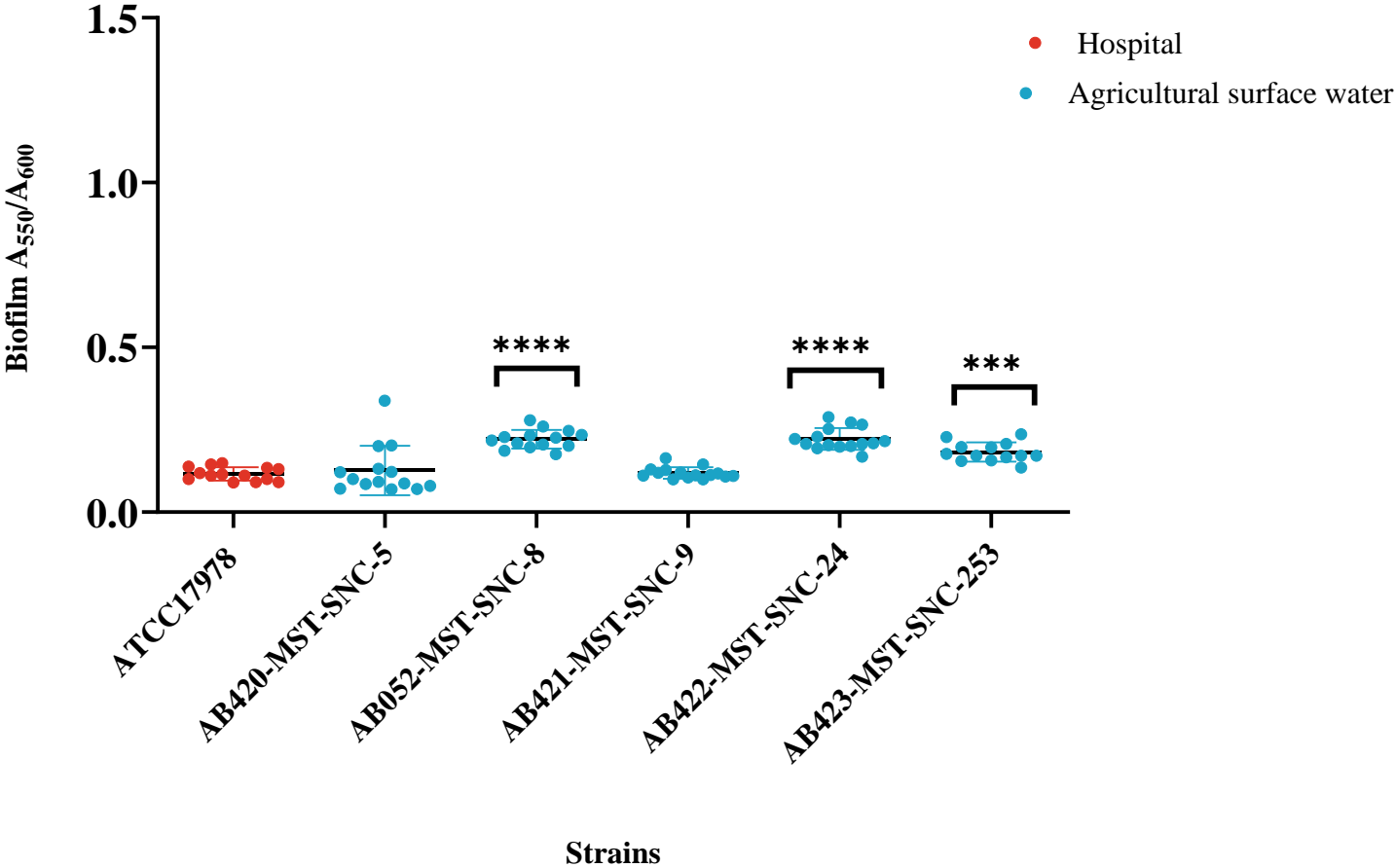


Figure 6: Spearman's Correlation Analysis of Motility and Biofilm Formation

