



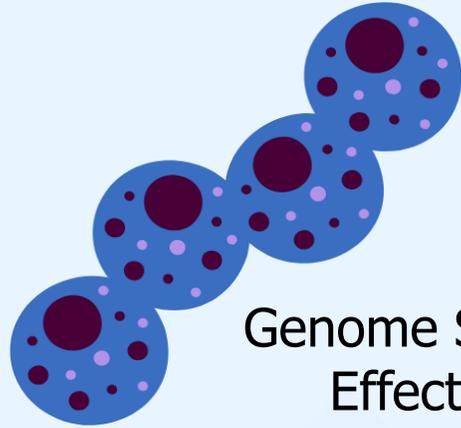
One Day One Genome

Staphylococcus haemolyticus (NIBMG_HMR_4)

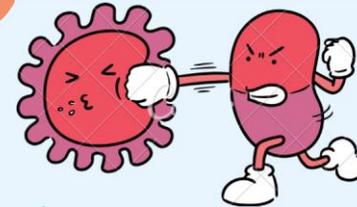
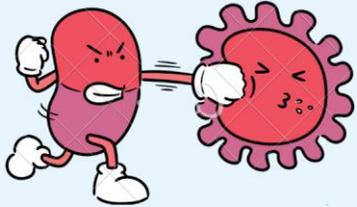
Bacteria found in healthy skin of humans

Outcompetes
 Severe
 Pathogens

Genome Sequencing will boost
 Effective Skin & Wound
 Treatment



Isolated from skin of
 elbow region of healthy
 humans



Staphylococcus haemolyticus (NIBMG_HMR_4)

Genome Accession Number: INS0005649

Quality of Genome Assembly and Annotation:

Results from indigenously developed **BHARAT** analysis pipeline:
(**B**acterial **H**ybrid genome **A**ssembly and **R**apid **A**nnotation **T**oolset)

Table 1: Assembly Details

Contigs	82
GC Content	32.66
Contig L50	11
Genome length	2,448,233 bp
Contig N50	82,512

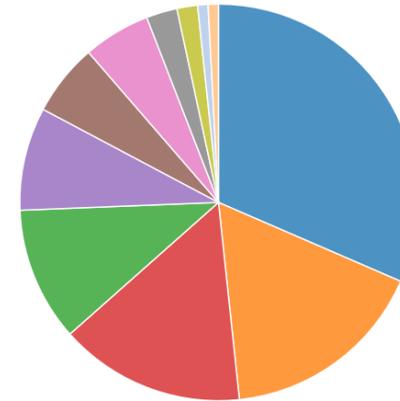
Table 2: Annotated Genome Features

CDS	2,414
tRNA	57
rRNA	4
Repeat Regions	0

Table 3: Antimicrobial Resistance Genes

AMR Mechanism	Genes
Antibiotic inactivation enzyme	ANT(6)-I, APH(3')-III/APH(3')-IV/APH(3')-VI/APH(3')-VII, BlaZ family, CatA8 family, Lnu(A)
Antibiotic resistance gene cluster, cassette, or operon	TcaA, TcaB, TcaB2, TcaR
Antibiotic target in susceptible species	Alr, Ddl, EF-G, EF-Tu, folA, Dfr, folP, gyrA, gyrB, inhA, fabI, Iso-tRNA, kasA, MurA, rho, rpoB, rpoC, S10p, S12p
Efflux pump conferring antibiotic resistance	BceA, BceB, NorA, YkkCD
Protein altering cell wall charge conferring antibiotic resistance	GdpD, MprF, PgsA

Subsystem Analysis



Subsystem (Subsystems, Genes)

- METABOLISM (75, 491)
- PROTEIN PROCESSING (40, 215)
- STRESS RESPONSE, DEFENSE, VIRULENCE (36, 144)
- ENERGY (26, 195)
- DNA PROCESSING (20, 88)
- CELLULAR PROCESSES (14, 85)
- RNA PROCESSING (13, 51)
- MEMBRANE TRANSPORT (6, 37)
- REGULATION AND CELL SIGNALING (4, 17)
- CELL ENVELOPE (2, 7)
- MISCELLANEOUS (2, 5)

Genome Assembly

