# The Prevalence and Molecular Biology of *Staphylococcus aureus* Isolated from Healthy and Diseased Equine Eyes in Egypt

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|  | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1- MZ005310/Arabian_horse/Egypt/SA-AH/2019 | | | | | | | | | | | | | | | | | | | | | | | | |
| 2- MZ005311/Draft_horse/Egypt/SA-DH/2019 | 0.0% | | | | | | | | | | | | | | | | | | | | | | | |
| 3- MZ005312/Donkey/Egypt/SA-D/2019 | 0.0% | 0.0% | | | | | | | | | | | | | | | | | | | | | | |
| 4- MK690487.1/Homo_sapiens/Nigeria/SPH045L/2018 | 0.0% | 0.0% | 0.0% | | | | | | | | | | | | | | | | | | | | | |
| 5- AP019751.1/Equus_caballus/Japan/JRA307/2018 | 0.0% | 0.0% | 0.0% | 0.0% | | | | | | | | | | | | | | | | | | | | |
| 6- CP034441.1/Bos_taurus/South_Korea/PMB_81-4/2015 | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | | | | | | | | | | | | | | | | | | | |
| 7- MF175203.1/horse/Iran/IRN-20/2017 | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | | | | | | | | | | | | | | | | | | |
| 8- CP017680.1/bakery_environment/USA/CFSAN007851/201 | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | | | | | | | | | | | | | | | | | |
| 9- CP017115.1/Homo_sapiens/South_Korea/FORC_045/201 | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | | | | | | | | | | | | | | | | |
| 10- CP052008.1/Homo_sapiens/USA/ER06690.3/2016 | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | | | | | | | | | | | | | | | |
| 11- KY110978.1/SGT_hospital/India/t127-88/2016 | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | | | | | | | | | | | | | | |
| 12- MH675823.1/cow/India/t7684-219e/2015 | 2.0% | 2.0% | 2.0% | 2.0% | 2.0% | 2.0% | 2.0% | 2.0% | 2.0% | 2.0% | 2.0% | | | | | | | | | | | | | |
| 13- MK690483.1/Homo_sapiens/Nigeria/SPH004R/2018 | 2.5% | 2.5% | 2.5% | 2.5% | 2.5% | 2.5% | 2.5% | 2.5% | 2.5% | 2.5% | 2.5% | 0.5% | | | | | | | | | | | | |
| 14- CP010402.1/Homo_sapiens/Greece/GR2/2006 | 2.5% | 2.5% | 2.5% | 2.5% | 2.5% | 2.5% | 2.5% | 2.5% | 2.5% | 2.5% | 2.5% | 0.5% | 0.0% | | | | | | | | | | | |
| 15- KC428640.1/Homo_sapiens/Egypt/Egy19A/2011 | 2.5% | 2.5% | 2.5% | 2.5% | 2.5% | 2.5% | 2.5% | 2.5% | 2.5% | 2.5% | 2.5% | 0.5% | 0.0% | 0.0% | | | | | | | | | | |
| 16- KC428635.1/Homo_sapiens/Egypt/Egy50A/2011 | 3.0% | 3.0% | 3.0% | 3.0% | 3.0% | 3.0% | 3.0% | 3.0% | 3.0% | 3.0% | 3.0% | 1.0% | 0.5% | 0.5% | 0.5% | | | | | | | | | |
| 17- KC142144.1/Homo_sapiens/Denmark/60558/2012 | 3.5% | 3.5% | 3.5% | 3.5% | 3.5% | 3.5% | 3.5% | 3.5% | 3.5% | 3.5% | 3.5% | 4.6% | 5.1% | 5.1% | 5.1% | 5.6% | | | | | | | | |
| 18- MG431238.1/Homo_sapiens/Australia/H010/2016 | 5.1% | 5.1% | 5.1% | 5.1% | 5.1% | 5.1% | 5.1% | 5.1% | 5.1% | 5.1% | 5.1% | 7.3% | 7.8% | 7.8% | 7.8% | 8.4% | 3.5% | | | | | | | |
| 19- CP013953.1/Homo_sapiens/Korea/NCCP14558/2013 | 5.1% | 5.1% | 5.1% | 5.1% | 5.1% | 5.1% | 5.1% | 5.1% | 5.1% | 5.1% | 5.1% | 7.3% | 7.9% | 7.9% | 7.9% | 8.5% | 4.7% | 5.1% | | | | | | |
| 20- LT992471.1/Homo_sapiens/Germany/17_LA_343/2017 | 5.1% | 5.1% | 5.1% | 5.1% | 5.1% | 5.1% | 5.1% | 5.1% | 5.1% | 5.1% | 5.1% | 7.3% | 7.8% | 7.8% | 7.8% | 8.4% | 3.5% | 0.0% | 5.1% | | | | | |
| 21- LT699704.1/Homo_sapiens/Australia/NZ15MR0322/2015 | 5.1% | 5.1% | 5.1% | 5.1% | 5.1% | 5.1% | 5.1% | 5.1% | 5.1% | 5.1% | 5.1% | 7.3% | 7.8% | 7.8% | 7.8% | 8.4% | 3.5% | 0.0% | 5.1% | 0.0% | | | | |
| 22- CP063801.1/Homo_sapiens/India/KHS103/2019 | 5.1% | 5.1% | 5.1% | 5.1% | 5.1% | 5.1% | 5.1% | 5.1% | 5.1% | 5.1% | 5.1% | 7.3% | 7.9% | 7.9% | 7.9% | 8.5% | 4.7% | 5.1% | 0.0% | 5.1% | 5.1% | | | |
| 23- LC577070.1/Homo_sapiens/Iraq/KAZ20/2019 | 2.5% | 2.5% | 2.5% | 2.5% | 2.5% | 2.5% | 2.5% | 2.5% | 2.5% | 2.5% | 2.5% | 0.5% | 0.0% | 0.0% | 0.0% | 0.5% | 5.1% | 7.8% | 7.9% | 7.8% | 7.8% | 7.9% | | |
| 24- CP049486.1/Homo_sapiens/USA/pt228/2016 | 5.1% | 5.1% | 5.1% | 5.1% | 5.1% | 5.1% | 5.1% | 5.1% | 5.1% | 5.1% | 5.1% | 7.3% | 7.9% | 7.9% | 7.9% | 8.5% | 4.7% | 5.1% | 0.0% | 5.1% | 5.1% | 0.0% | 7.9% | |

**Figure S1.** Diversity percent between *S. aureus* strains identified in this study and other strains from GenBank. Diversity was calculated by MEGA X software.