



Supplementary

Resurgence of Chloramphenicol Resistance in Methicillin-Resistant *Staphylococcus aureus* Due to the Acquisition of a Variant Florfenicol Exporter (*fexAv*)-Mediated Chloramphenicol Resistance in Kuwait Hospitals

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Table S1. Virulence gene profile of chloramphenicol-resistant MRSA isolates.

Virulence Factors	ST627-VI-t688 (MRSA-VI +SCCfus)	ST5-V-t688 (WA MRSA 11/34)	ST5-V-t688 (WA MRSA 81/ 85)	ST627-VI-t450 (MRSA-VI +SCCfus)	ST627-VI-t954 (MRSA-VI +SCCfus)	ST239-III-t860 (Vienna/Brazil- ian)	ST239-III-t037 (Vienna/Brazil- ian)
Regulatory Genes							
<i>sarA</i>	+	+	+	+	+	+	+
<i>saes</i>	+	+	+	+	+	+	+
<i>agrI</i>	-	-	-	-	-	+	+
<i>agrII</i>	+	+	+	+	+	-	-
Enterotoxins							
<i>sea</i>	+	+	+	+	+	-	+
<i>sed</i>	+	+	-	+	+	-	-
<i>sej</i>	+	+	-	+	+	-	-
<i>sek</i>	-	-	-	-	-	+	+
<i>seq</i>	-	-	-	-	-	+	+
<i>ser</i>	+	+	-	+	+	-	-
<i>egc</i>	+	+	+	+	+	-	-
Leukocidins							
<i>lukF</i>	+	+	+	+	+	+	+
<i>lukS</i>	+	+	+	+	+	+	+
<i>lukD</i>	+	+	+	+	+	+	+
<i>lukE</i>	+	+	+	+	+	+	+
<i>lukX</i>	+	+	+	+	+	+	+
<i>lukY</i>	+	+	+	+	+	+	+
Hemolysins							
<i>hlgA</i>	+	+	+	+	+	+	+
<i>hld</i>	+	+	+	+	+	+	+
<i>hl</i>	+	+	+	+	+	+	+
<i>hla</i>	+	+	+	+	+	+	-
<i>hly</i>	+	+	+	+	+	+	+
<i>hlIII</i>	+	+	+	+	+	+	+
Hly-Converting Phages							
<i>Sak</i>	+	+	+	+	+	+	+
<i>Chp</i>	-	-	-	-	-	+	-
<i>Scn</i>	+	+	+	+	+	+	+

Capsular Polysaccharide Associated Genes							
<i>Cap 5</i>	+	+	+	+	+	-	-
<i>Cap 8</i>	-	-	-	-	-	+	+
Virulence Factors	ST627-VI-t688 (MRSA-VI +SCCfus)	ST5-V-t688 (WA MRSA 11/34)	ST5-V-t688 (WA MRSA 81/ 85)	ST627-VI-t450 (MRSA-VI +SCCfus)	ST627-VI-t954 (MRSA-VI +SCCfus)	ST239-III-t860 (Vienna/Brazil- ian)	ST239-III-t037 (Vienna/Brazil- ian)
Proteases							
<i>Aur</i>	+	+	+	+	+	+	+
<i>splA</i>	+	+	+	+	+	-	+
<i>splB</i>	+	+	+	+	+	-	+
<i>splE</i>	-	-	-	-	-	-	+
<i>sspA</i>	+	+	+	+	+	+	+
<i>sspB</i>	+	+	+	+	+	+	+
Adhesion Factors							
<i>clfA</i>	+	+	+	+	+	+	+
<i>clfB</i>	+	+	+	+	+	+	+
<i>cna</i>	-	-	-	-	-	+	+
<i>Fib</i>	+	+	+	+	+	+	+
<i>fnbA</i>	+	+	+	+	+	+	+
<i>fnbB</i>	+	+	+	+	+	+	+
<i>map</i>	+	+	+	+	+	+	+
<i>sasG</i>	+	+	+	+	+	+	+
Biofilm Associated Genes							
<i>icaA</i>	+	+	+	+	+	+	+
<i>icaC</i>	+	+	+	+	+	+	+
<i>icaD</i>	+	+	+	+	+	+	+
Type1 Restriction Modification System							
<i>hsdS1</i>							
<i>hsdS2</i>	-	+	+	-	-	+	+
<i>hsdS3</i>	+	+	+	+	+	-	+
<i>hsdSx (CC25)</i>	-	+	+	+	+	+	+
<i>hsdSx (CC15)</i>	+	-	-	-	-	-	-

Abbreviations: aur, aureolysin, hlgA, haemolysin gamma; hla, haemolysin alpha; hlb, haemolysin beta; hl/hlIII, putative membrane protein; sak, staphylokinase; chp, chemotaxis-inhibiting protein; scn, staphylococcal complement inhibitor, clfA, clumping factor A; clfB, clumping factor B; fnbA, fibronectin-binding protein A; fnbB, fibronectin-binding protein map, major histocompatibility complex class II; cna, collagen-binding adhesin. SplA, serinprotease A, SplB, serinprotease B, SplE, serinprotease E, sspA, glutamylendopeptidase, sspB, staphopain B, protease. Enterotoxin gene cluster (egc) consist of *seg*, *sei*, *selm*, *seln*, *selo*, *selu*. All isolates were negative for genes encoding Pantone Valentine leucocidin (PVL), toxic shock syndrome toxin 1 (TSST1), exfoliative toxin (ET), Arginine Catabolic Mobile Element (ACME) and epidermal cell differentiation inhibitors (edin).