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Global Emergence of MDR/XDR *Acinetobacter* Species

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The genus *Acinetobacter* is currently defined as Gram-negative, strictly aerobic, glucose-non-fermenting, non-motile, catalasepositive and oxidase-negative bacteria. More than 30 named and unnamed *Acinetobacter* spp. have been described. Genospecies 1 (*Acinetobacter calcoaceticus*), genospecies 2 (*Acinetobacter baumannii*), genospecies 3 (*Acinetobacter pittii*) and genospecies 13 TU (*Acinetobacter nosocomialis*) are genetically closely related and has been proposed that these species be referred to as a group, the *A. calcoaceticus-baumannii* complex. Multidrug-resistant (MDR), extensively drug-resistant (XDR), and pandrug-resistant (PDR) isolates are frequently found among *A. baumannii* rather than *A. nosocomialis* or *A. Pittii.* Infection caused by these resistant superbugs poses a great threat to public health worldwide, particularly in most Asia countries. Risk factors for colonization or infection with MDR/XDR/PDR *A. baumannii* include critically-ill patients with prolonged length of hospitalization, exposure to an intensive care unit, receipt of mechanical ventilation, exposure to a variety of broad-spectrum antibiotics, recent surgery, invasive procedures, and underlying severity of illness. Bloodstream infection caused by *A. baumannii*, including MDR/XDR/PDR isolates was associated with a higher mortality rate than bacteremia due to *A. nosocomialis* or *A. pittii*, Combination therapy with at least one in vitro active agent for MDR/XDR/PDR *A. baumannii* infections is usually recommended. Tigecycline, polymyxin B (colistin), fosfomycin, sulbactam or rifampin in combination with other agents are promising options. Clonal spread among MDR/XDR/PDR *A. baumannii* isolates is common, however, its occurrence among *A. nosocomialis* or *A. pittii* is rarely encountered.