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Título	Dynamic of High-Risk <i>Acinetobacter baumannii</i> Major Clones in a Brazilian Tertiary Hospital During a Short Time Period
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Resumo	We characterized by whole-genome sequencing (WGS) six carbapenem-resistant <i>Acinetobacter baumannii</i> strains isolated from a Brazilian tertiary hospital during a 14-day period. The IS <i>Aba1</i> - <i>bla</i> _{OXA-23} structure was found in the chromosome of five isolates, whereas <i>bla</i> _{OXA-72} was inserted in a 16.6-kb plasmid in two isolates. The presence of IS <i>Aba1</i> - <i>bla</i> _{ADC} -like justified the high broad-spectrum cephalosporins minimal inhibitory concentrations (MICs) (MIC ₅₀ , > 512 mg/L) verified in all isolates. Only minocycline (MIC ₅₀ , ≤ 0.5 µg/mL), polymyxin B (MIC ₅₀ , 0.5 µg/mL), and tigecycline (MIC ₅₀ , 0.5 µg/mL) were <i>in vitro</i> active against such isolates. A diversity of other antimicrobial resistance determinants (<i>aph</i> (3')-Ia, <i>aadA1</i> , <i>aac</i> (3)-IIa, <i>strA</i> , <i>strB</i> , <i>sul2</i> , <i>drfA1</i> , <i>mph</i> (E), <i>msr</i> (E), <i>tetB</i> , and <i>floR</i>) was also observed, which may confer resistance to at least six distinct antimicrobial classes. Four distinct pulsed-field gel electrophoresis (PFGE) profiles were observed during the study period, which belonged to ST79/ST258 (<i>n</i> =2; IC5), ST25/ST229 (<i>n</i> =2; IC7), ST1 (<i>n</i> =1; IC1), and ST162/ST235 (<i>n</i> =1; IC4). Although the ST1 isolate that carried <i>bla</i> _{OXA-23} and <i>bla</i> _{OXA-72} was introduced in this hospital setting by a transferred patient, two clonally related ST79/ST258 isolates carrying either one of these carbapenemase encoding genes were recovered from two patients who were hospitalized within the same period of time in the same hospital unit. Finally, a good correlation between PFGE/MLST, <i>bla</i> _{OXA-51} variant, and single nucleotide polymorphisms was also observed. Here we demonstrated that distinct extensively drug-resistant <i>A. baumannii</i> clones can circulate in the same hospital setting during a short time period, illustrating a very complex epidemiological scenario for this priority pathogen.
Fomento	