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Degree Project in Molecular Biotechnology

Masters Programme in Molecular Biotechnology Engineering,
Uppsala University School of Engineering

UPTEC X 14 002	Date of issue 2014-06	
Author	Johanna Spaak	
Title (English)	CellDirector® 3D, a reliable and rapid method for determining antibiotic susceptibility	
Title (Swedish)		
Abstract	<p>To determine an accurate antibiotic therapy for patients with sepsis is vital. However, it is hampered by the lack of rapid diagnostic procedures. In this study CellDirector® 3D has been evaluated for its ability to determine the vancomycin susceptibility of a number of <i>Staphylococcus aureus</i> isolates. The novel microfluidic assay showed good agreement with standard Etest and macrodilution and the variability of the MIC obtained with CellDirector® 3D was much smaller compared to the standard methods. CellDirector® 3D is a reliable and rapid (4-6 hours) method to determine MIC both on pure cultures and directly on clinical blood cultures. With further improvement this method has potential to dramatically reduce the time until appropriate therapy for sepsis patients.</p>	
Keywords	Sepsis, Antimicrobial Susceptibility Testing, MIC, Microfluidic assay	
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Project name	Sponsors Gradientech AB	
Language English	Security	
ISSN 1401-2138	Classification Secret until 2015-06	
Supplementary bibliographical information	Pages 52	
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