

Molecular detection to improve surveillance of multi-resistant bacteria

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MOLECULAR DETECTION TO IMPROVE SURVEILLANCE OF MULTI-RESISTANT BACTERIA

1. The use of molecular methods is vital for rapid implementation of adequate infection prevention safety measures. (this thesis)
2. Screening for multi-resistant bacteria in high-risk patients prior to hospitalization is essential to prevent transmission of these bacteria within the hospital environment. (this thesis)
3. Molecular-based methods play an important role in the correct detection of multi-resistant bacteria since currently recommended phenotypical screening and confirmation methods can lead to either false-positive or false-negative results. (this thesis)
4. Periodically creating an overview on the distribution of resistance genes is important to maintain the best feasible diagnostic system to detect multi-resistant bacteria. (this thesis)
5. When financial considerations are becoming decisive in determining the policy of microbiological diagnostics instead of scientific data, the quality of healthcare will be at risk.
6. Introducing molecular methods for the detection of antimicrobial resistance genes in non-cultivable pathogens can be crucial for correct treatment of patients infected by these pathogens.
7. The future implementation of next-generation sequencing in routine laboratories for medical microbiological will gain new insights in the combat against antimicrobial resistance.
8. As a result of the rapid detection of resistance genes using validated assays, adequate therapy to treat infected patients can be installed as soon as possible. (valorization)
9. Progress is made by trial and failure; the failures are generally a hundred times more numerous than the successes; yet they are usually left unchronicled. (William Ramsay)
10. The stress that is involved in the attempt to obtain a PhD, is immediately replaced by a state of euphoria when accomplishing this PhD.