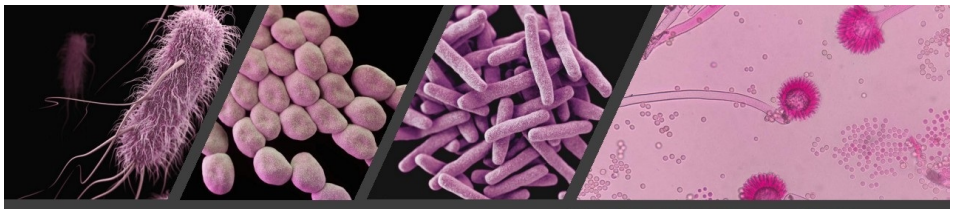

Contribution ID: **144** Type: **Oral presentation**

Towards harmonised methods for surveillance of antimicrobial resistance in clinical infections from companion animals in the UK (VetCLIN AMR)

Friday 12 September 2025 11:15 (15 minutes)

Introduction: Understanding antimicrobial resistance (AMR) transmission between different sectors requires robust surveillance systems aligned with One Health principles. However, the lack of consensus for performing and interpreting antimicrobial susceptibility testing (AST) on veterinary clinical isolates, is hampering the usefulness of these data.
Aim: to evaluate the current methodological approaches used by veterinary diagnostic laboratories in the UK, for AST and clinically relevant AMR phenotypes in companion animals bacterial isolates.
Methods: New minimum inhibitory concentration (MIC) plates were designed. Target bacterial isolates (Staphylococcus aureus, n=189; S. pseudintermedius n=641; Escherichia coli, n=669) were collected from collaborating laboratories and tested with a standardised AST method. Results were interpreted according to CLSI VET01 7th Ed. and compared with results generated by laboratories. A free proficiency testing (PT) assay was established to identify variability in AST methodology.
Results: Initial AST data comparison showed important discrepancies in the clinical interpretation of AST for some bacterial pathogen/antibiotic combinations. PT assays revealed that 92% and 85% of laboratories correctly detected methicillin resistance in S. aureus and ESBL-production in E. coli, respectively.
Conclusions: Further training and guidance for AST methodology must be addressed to harmonise methods and improve data comparability for AMR surveillance.

Keywords

harmonisation, AST, clinical, companion animals

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160

Professional Status of the submitter, who is also the speaker

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