

3<sup>rd</sup> World Congress and Exhibition on

# ANTIBIOTICS AND ANTIBIOTIC RESISTANCE

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## Survey on antimicrobial prescribing patterns in small animal veterinary practice as a tool for drawing up guidelines for the correct use of antimicrobials in pets

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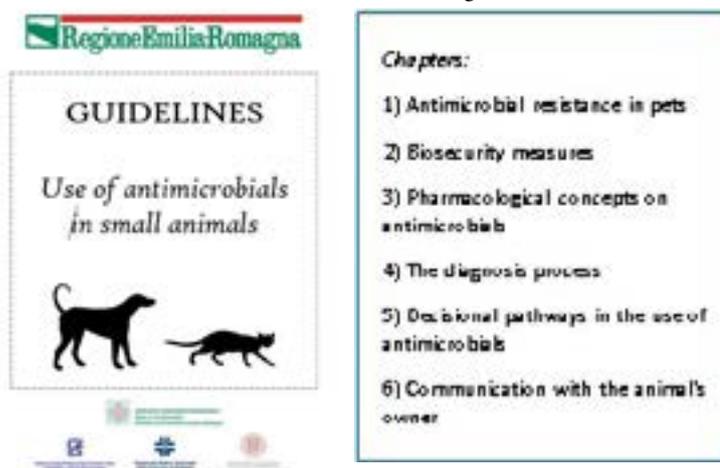
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**Statement of the Problem:** Antimicrobial Resistance (AMR) is considered a major public health issue and there is an increase in its prevalence in both humans and animals. Lately, many studies focused on the role of pets in AMR diffusion, highlighting the lack of data on prescribing patterns and the need for guidelines for the correct use of antimicrobials in these species. Studies in literature demonstrated that the adoption of guidelines helped improving prescribing patterns and reducing antimicrobial use. The purpose of this study was to gather data on antimicrobial prescribing patterns for pets in Emilia-Romagna Region and to use these results while drawing up guidelines for small animal practitioners.

**Methodology & Theoretical Orientation:** In the context of a regional project on antimicrobial resistance, small animal practitioners were invited by the Veterinary Professional Association of Emilia Romagna to voluntarily complete an online questionnaire, aimed to understand their prescribing habits and how they apply biosecurity measures. A group of experts then analyzed the collected data and, based on recent regulations, scientific data and personal experience, issued practical guidelines. These include specific chapters, tackling the different aspects that could be of interest for the everyday practice of small animal veterinarians.

**Findings:** The most commonly prescribed antimicrobials resulted penicillins, fluoroquinolones and cephalosporins; critically important antibiotics were employed mainly to treat urinary tract infections. A general awareness of the AMR issue and of the importance of applying biosecurity measures were encouraging outcomes.

**Conclusions & Significance:** This overview of the prescribing patterns of antibiotics represented a useful tool for issuing guidelines on the correct use of these drugs in small animal practice. Guidelines will be soon available for all veterinarians, hoping that the provided practical information will be a useful for containing antimicrobial resistance.



### Biography

Andrea Barbarossa has his expertise in many aspects of Veterinary Pharmacology. These include pharmacokinetics/pharmacodynamics and residues studies, but also antimicrobial resistance. In this context, he took part in a project of the University of Copenhagen focused on identifying synergies between antimicrobial and non-antibiotic drugs commonly used in veterinary medicine as a possible strategy to restore antimicrobial susceptibility in MRSP. In parallel, he took part in a 3 years project promoted by the Emilia Romagna Regional Veterinary Service aimed at understanding how antimicrobials are used in veterinary medicine and at developing specific guidelines for their correct use in pets, swine and bovine. It has already been demonstrated how these tools can be helpful at containing antimicrobial resistance.

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