

## **Book of Abstracts**

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## Emilia Romagna's strategy towards a better use of antibiotics in Veterinary Medicine

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The role of animals, also as non-foodborne sources, in the diffusion of antibiotic resistance has lately been underlined in a number of studies. There is also a the lack of data on prescribing patterns in veterinary medicine and of guidelines on the correct use of antibiotics. In Italy, a national scale strategy is still missing. In this context and in line with the 'One Health' perspective, the Human and Veterinary Health Services of Emilia Romagna Region and the University of Bologna are carrying out a joint project (2014-2017) with two strictly linked objectives. The first, is to produce a reliable assessment of the use of antibiotics in both companion and farm animals in the Region, in order to highlight the related critical aspects in the different species. The second, is to issue specific guidelines on the prudent use of antimicrobials, focusing on the critical aspects that emerged from the assessment. In Italy, due to absence of the electronic prescription in veterinary medicine, no precise quantitative data on the use of drugs are available. Small animal veterinarians were therefore invited to voluntarily complete an online questionnaire concerning their professional activity. The collected data revealed a general awareness of the antimicrobial resistance issue but also evidenced a certain variability on the prescribing patterns, especially concerning some Critically Important Antimicrobials (CIAs). Similarly, while fulfilling the mandatory forms for the surveillance program, official veterinarians conducting controls in breeding farms were also asked to answer a list of questions specifically created for the purpose. The still frequent mass-treatment, often without specific diagnosis, and the extended prophylactic use in certain livestock chains proved to be the main weaknesses. However, dosages and duration of treatments were correct in the majority of the cases. Besides providing for the first time an overview of the antibiotic use in Emilia Romagna, this investigation helped understanding the critical aspects that require special attention while drawing out guidelines on the prudent use of these drugs. These will be completed in 2017 and will include specific sections for each species, taking into account the most frequent diseases as well as, for food-producing animals, particular aspects of the farming system. In the meantime, in collaboration with Regional experts on human and veterinary infectious risks, a number of educational events on the topic have been organized for veterinarians and pharmacists across the Region. It has already been demonstrated that the adoption of guidelines helps improving prescribing patterns and reducing the use of antibiotics. Therefore, we believe that the present project can represent an important milestone and a useful tool within the fight against antibiotic resistance in Italy.

Keywords: antimicrobial resistance; prudent use; veterinary medicine; guidelines

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