

**TITLE:** SURVEILLANCE OF BETA-LACTAMASES IN *Pseudomonas aeruginosa* ISOLATED FROM PETS IN SÃO PAULO CITY.

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**ABSTRACT:**

*Pseudomonas aeruginosa* is one of the main nonfermentative Gram negative bacilli of clinical importance, as in human medicine, as in veterinary, because of its capacity to cause different types of infection and possible development of antimicrobial resistance. On the present study, 50 samples from pets and positives for *P. aeruginosa* were selected and submitted to four different tests as: Antimicrobial Susceptibility Testing, Disk Approximation Test with EDTA (Ethylenediaminetetraacetic Acid), Disk Combination Test with EDTA and Disk Approximation Test with PBA (Phenylboronic Acid). According to the results obtained, 24 samples were KPC carbapenemases producers, 22 were oxacillinases producers associated with porins decrease, 5 were metallo-beta-lactamases producers and 4 were cephalosporinases producers. Those data confirm that the bacterial resistance dissemination is something that is taking on large proportions and becoming more emergent, and that the close contact between humans and their pets nowadays, correspond directly with the resistant bacteria cross-transmission.

**Keywords:** *Pseudomonas aeruginosa*. Veterinary. Beta-lactamase. Bacterial Resistance. Metallo-beta-lactamase. KPC. ESBL. AmpC. Pets.

**Development Agency:** Dognostic – Unidade Veterinária Especializada