# Book of Abstracts

## XXIII Meeting of the Portuguese Society Animal Pathology

*Experimental Pathology*

9 and 10 June 2018

# Abstracts in Conference Proceedings

# XXIII Encontro da Sociedade Portuguesa de Patologia Animal

# XXIII Meeting of the Portuguese Society of Pathology

**9 e 10 de junho 2018 Escola Universitária Vasco da Gama - Coimbra**

**9th and 10th June 2018 Escola Universitária Vasco da Gama - Coimbra**

| **Saturday** | |
|---|---|
| 8.30-9.00 | Registration opens |
| 9.00 - 9.15 | Opening Session |
| | 1st Plenary Sessions. Moderator - **Tânia Carvalho** |
| 9.15 - 10.15 | Expert Lecture: Reproducibility of Animal Studies: Inadvertent Fraud in Mouse Biomedical Publications: Biology and Pathology. **Jerrold Ward (Global Vet Pathology)** |
| **10.15-10.45** | **Coffee Break / Poster Tour P1 – P6** |
| 10.45-11.30 | Expert Lecture: Non-lesions, Misdiagnoses, Missed Diagnoses and Other Interpretive Challenges in Fish Histopathology Studies. **Jeffrey Wolf (Experimental Pathology Laboratories, Inc. - EPL)** |
| 11.30-13.00 | Mystery Slide Seminar: Virtual Microscopy – The Kidney - **Jerrold Ward and Jeffrey Wolf** |
| **13.00-14.00** | **Lunch** |
| | 2nd Plenary Sessions. Moderator **- Hugo Pissarra** |
| 14.00-14.45 | Science Slam: Single cell imaging of tumor heterogeneity and response to therapy in human-zebrafish xenografts-towards personalized medicine. **Rita Fior (Fundação Champalimaud)** |
| 14.45-15.15 | Lab Animal Science Session: How do we build the case for the use of animals in research and what is the legislation that protects the use of animals in research. **Dolores Bonaparte (Fundação Champalimaud)** |
| **15.15 -15.45** | **Coffee Break / Poster Tour P7 – P12** |
| | Free Communications – Oncology. Moderator: **Fernanda Seixas** |
| 15:45 -16.00 | Lymph node micrometastases and isolated tumor cells: prognostic significance in canine mammary cancer. **Adelina Gama** |
| 16.00-16.15 | Clinical importance of Topoisomerase Iiα expression in canine mammary tumors. **Helena Valdevino** |
| 16.15-16.30 | Circulating nucleolin as a potential biomarker for canine tumors. **Carla Cruz** |
| 16.30-16.45 | Spontaneous Neoplasms in commonly used laboratory animal species: A critical overview and case discussion. **Pedro Ruivo** |
| 16.45-17.15 | Presentation by the Winner of the SPPA Prize. Moderator **Pedro Faísca**<br>Utilização de ferramentas estereológicas no grading citológico de mastocitomas cutâneos caninos: um passo para a (in)diferencia? **Joana Maria Fins Marques** |
| 17.15-17.45 | SPPA General Assembly |
| 20.00 | Social Dinner |

## Posters

P1 - Apoptosis in the ovarian follicles of female dogs and cats along the oestrus cycle - **Filipa Lúcio**

P2 - Canine follicular tumours a look at clinical parameters - **Helena Vala**

P3 - Jennet (Equus asinus) endometrial biopsy evaluation. Application of Kenney's scale - **Maria Anjos Pires**

P4 - Comparison of Two Histochemical Techniques for Copper Detection in Hepatic Tissue from Ovine and Canine - **Maria Conceição Peleteiro**

P5 - Copper retention in liver pathology cases in dogs - **Joana Freitas**

P6 - Quantifying hepatic fibrosis in murine models How to obtain representative results in a less laborious way - **José Catarino**

P7 - Quantifying myocardial fibrosis on murine model samples stained with Masson's Trichrome using ImageJ Validating the use of macros as valid and less variable method – **José Catarino**

P8 - Changes in carcinoembryonic antigen (CEA) immunoexpression in feline endometrial lesions - **Maria Anjos Pires**

P9 - Equine ocular mast cell tumor histopathological and immunohistochemical description - **Ana Flores**

P10 - Comparative study of two immunocytochemistry methods in the diagnosis of lymphoma in small animals – **Pâmela Valente**

P11- Multifocal nodular oral histiocytosis A case report - **Fernanda Seixas**

P12 - Prostate tumorigenesis perspectives from a rodent animal model - **Fernanda Seixas**

P13 - Seminal vesicle lesions in a chemical-induced animal model - **Fernanda Seixas**

P14 - Establishment of Histopathological Patterns for Rabbit Haemorrhagic Disease caused by RHDV2 – **Fábio Santos**

P15 - Histopathological alterations in the organs of female Sprague-Dawley rats in an assay of mammary carcinogenesis - **Carmen Vasconcelos-Nobrega**

P16 - Urinary Bladder Cancer – BBN Rodent Models - **Carmen Vasconcelos-Nobrega**

P17 - Comparison between Visual Assessment and Automated Digital Image Analysis (ImmunoRatio) of Ki67 Index in Mastocytoma, Feline Mammary Carcinoma and Canine Mammary Tumors- **Serras M**

**Sponsors SPPA Award:**

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# Avaliação histopatológica em frangos submetidos a diferentes tratamentos para reduzir as emissões de amoníaco

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Introdução

O excesso de amoníaco é responsável por perdas económicas na produção de broilers com efeitos negativos na saúde e bem-estar e na qualidade da carne.

Objetivos

Avaliar o efeito de aditivos na cama e no alimento para reduzir as emissões de amoníaco, incluindo os efeitos na saúde animal num estudo in vivo.

Material e Métodos

Foram utilizados um controlo, 5 aditivos na cama (clinoptilolite, CliCama; cloreto de alumínio + carbonato de cálcio, ClAl; óleo de soja, OS; sulfato de alumínio, SulAl; sulfato de magnésio, SulMg) e 2 alimentares (clinoptilolite, CliAli; De-Odorase, DeOd).

No início do estudo, 26 frangos foram alojados aleatoriamente nas unidades experimentais e no final do ciclo de engorda (35 dias de idade) foram abatidos (4 por unidade). As amostras foram colhidas e processadas para histopatologia.

Foi realizado o teste não-paramétrico de Kruskal-Wallis e o teste post-hoc de comparação múltipla de Dunn.

Resultados

Os resultados revelaram que o ClAl estava associado a uma maior severidade lesional, enquanto o SulAl e o CliAli estavam associados a menor gravidade, seguidos do OS, CliCama (em exéquo) e, finalmente, DeOdAli

Conclusão

Conclui-se que o SulAl e o CliAli podem ser usados como medidas mitigadoras da volatilização de amoníaco sem comprometer a saúde das aves.

Agradecimentos

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# Histopathological evaluation in broilers submitted to different additives to control ammonia volatilization

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Introduction

Ammonia excess is an economic loss factor in broiler production with several negative effects in health and welfare, as well as negative effects in meat quality.

Objectives

The objective of this in vivo study was to evaluate the effect on animal health of litter and feed additives (organic, mineral and chemical) to control ammonia volatilization.

Material and Methods

A control, 5 additives in the litter (clinoptilolite, CliCama; aluminium chloride + calcium carbonate, ClAl; soybean oil, OS; aluminium sulphate, SulAl; magnesium sulphate, SulMg) and 2 in the feed (clinoptilolite, CliAli; De-Odorase, DeOd) were used.

In the beginning of the experiment (day 0), 26 broilers were randomly allocated by house broiler. At the end of fattening cycle (35 days-old), 64 broilers were slaughtered (4 by house broiler). Samples were collected and processed for routine histopathology.

Kruskal-Wallis non-parametric test was performed, as well as Dunn's multiple comparison post-hoc test.

Results

The results revealed that ClAl was associated with more severe lesions and, in contrast, SulAl and CliAli were associated with less severity of lesions, followed by OS, CliCama (in exequo) and finally DeOdAli.

Conclusion

The authors conclude that both SulAl and CliAli could be used as mitigating measures for ammonia volatilization without compromising broiler health.

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