Sample Abstracts:
Please review the abstracts below for an example of how your submission might look in the program booklet.

Single Author Affiliation Submission:

Efficacy of anticancer drugs in canine mammary carcinoma

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Tumors of the mammary gland are the most common tumors of intact female dogs. Most of these tumors are malignant, with a potential of regional and distant metastasis. The range of drugs used for treatment of canine mammary tumor is very limited due to the fact that there is lack of information about the efficacy of available anticancer drugs on canine mammary tumors. The aim of this study is to better understand the effect of anticancer drugs, cisplatin and fulvestrant, on canine mammary carcinoma. CMT27 cell line was used to evaluate the efficacy of the anticancer drugs. The results showed that 10 nM cisplatin and 100 nM fulvestrant for 48 hours caused 47.66% and 83.3% cell viability compared to controls, respectively. Furthermore, cisplatin-treated cells had an increase in Bcl-2 expression compared to control while fulvestrant-treated cells had an increase in Bcl-2 and cyclin D1 expressions. Interestingly, fulvestrant-treated cells reduced cell migration significantly compared to control. Currently, combinational treatment of cisplatin and fulvestrant are being investigated since these drugs have different modes of action. Overall, the findings demonstrated that cisplatin and fulvestrant have potential role in the treatment of canine mammary carcinoma.

Research Grant: Johnson Cancer Research Center
Student Support: Merial Veterinary Research Scholars Program

Multiple Author Affiliations Submission:

Equine PCV, Erythrocyte Potassium and Transferrin Correlation

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Differentiating between horses with regenerative and non-regenerative anemia can assist the clinician in determining the cause and treatment. However, evaluating regenerative status in equine anemias is difficult because horses do not release reticulocytes into circulation. The purpose of this pilot study was to determine if there is a relationship between intracelluar erythrocyte potassium concentration (K+) and surface receptor transferrin expression. It has been shown that transferrin expression increases with erythrocyte immaturity. The hypothesis of this study was that intracellular erythrocyte K+ would increase in positive correlation with transferrin expression; signifying the utility of intracellular erythrocyte K+ as a biomarker for identifying equine regenerative anemias. The following were measured in 13 horses: blood packed cell volume (PCV) by microhemocrit tube centrifugation of heparinized blood; serum and lysed heparinized blood K+ by ion-selective electrode method; mean cell K+ concentrations (MCKC) normalized for statistical analysis; and transferrin by commercial ELISA assay on lysed heparinized blood. Results included: PCV range 19-54%; MCKC range 63.4-92.4 mEq/L; and transferrin range -43.7-63.7 pg/L. Data were found to be normally distributed. Pearson correlation results were significant for PCV-MCKC (coefficient 0.599, P-value 0.018) and approached significance for MCKC-transferrin (coefficient -0.471, P-value 0.077). However, no association was found between PCV-transferrin (coefficient 0.059, P-value 0.835). These findings do not support the hypothesis that MCKC increases in association with surface receptor transferrin expression in equine erythrocytes.

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