



# Corrigendum: Comparative Pharmacokinetics of Meloxicam Between Healthy Post-partum vs. Mid-lactation Dairy Cattle

Rochelle Warner<sup>1</sup>, Joshua A. Ydstie<sup>1</sup>, Larry W. Wulf<sup>2</sup>, Ronette Gehring<sup>3</sup>, Johann F. Coetzee<sup>4</sup>, Jonathan P. Mochel<sup>1,5</sup> and Patrick J. Gorden<sup>1\*</sup>

<sup>1</sup> Department of Veterinary Diagnostic and Production Animal Medicine, Iowa State University College of Veterinary Medicine, Ames, IA, United States, <sup>2</sup> Analytical Chemistry Section, Veterinary Diagnostic Laboratory, Iowa State University College of Veterinary Medicine, Ames, IA, United States, <sup>3</sup> Veterinary Pharmacotherapy and Pharmacy, Department of Population Health Sciences, Utrecht University, Utrecht, Netherlands, <sup>4</sup> Department of Anatomy and Physiology, Kansas State University College of Veterinary Medicine, Manhattan, KS, United States, <sup>5</sup> SMART Pharmacology, Department of Biomedical Sciences, Iowa State University College of Veterinary Medicine, Ames, IA, United States

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## A Corrigendum on

### Comparative Pharmacokinetics of Meloxicam Between Healthy Post-partum vs. Mid-lactation Dairy Cattle

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Arturo Anadón,  
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### \*Correspondence:

Patrick J. Gorden  
pgorden@iastate.edu

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In the original article, there was a mistake in the legend for **Tables 2 and 4** as published. **In these tables, the number of cows in each group were stated incorrectly.** The correct legend appears below.

**Table 2.** Plasma concentrations ( $\mu\text{g/mL}$ ) for meloxicam from seven post-partum cows compared to five mid-lactation cows that received intravenous administration of a single dose of meloxicam at 0.2 mg/kg. Results are presented as geometric means and 95% confidence interval.

**Table 4.** Plasma pharmacokinetic parameters for meloxicam from seven post-partum cows compared to five mid-lactation cows intravenously administered a single dose of meloxicam at 0.2 mg/kg. Results are presented in geometric means and 95% confidence intervals. *P*-values are based on non-parametric Wilcoxon Rank Sums 2-sample normal approximation.

In the original article, there was a mistake in **Table 4** as published. **In this table, the units for  $V_d$  should have been L/kg.** The corrected **Table 4** appears below.

In the original article, there was a mistake in **Table 5** as published. **In this table, the units for  $V_z/F$  should have been L/kg and the values for  $V_z/F$  were incorrectly reported as mL/kg.** The corrected **Table 5** appears below.

The authors apologize for this error and state that this does not change the scientific conclusions of the article in any way. The original article has been updated.

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**TABLE 4 |** Plasma pharmacokinetic parameters for meloxicam from seven post-partum cows compared to five mid-lactation cows intravenously administered a single dose of meloxicam at 0.2 mg/kg.

IV	Mid-lactation	Post-partum	P-value
$C_{max}$ ( $\mu\text{g/mL}$ )	1.22 (0.92–1.55)	1.06 (0.84–1.34)	0.26
$T_{max}$ (h)	0.13 (0.08–0.19)	0.23 (0.08–4.01)	0.73
$V_d$ (L/kg)	0.29 (0.24–0.35)	0.31 (0.19–0.48)	0.94
CL (L/kg/h)	0.03 (0.02–0.03)	0.01 (0.009–0.02)	0.009
$AUC_{\infty}$ (h $\times$ $\mu\text{g/mL}$ )	8.26 (6.62–10.10)	16.30 (6.18–31.75)	0.009
$AUC_{\%extrapolated}$	1.65 (1.29–2.06)	1.68 (–11.13–29.84)	0.14
$\lambda_z$ ( $\text{h}^{-1}$ )	0.08 (0.08–0.09)	0.04 (0.03–0.07)	0.006
$AUMC_{\infty}$ (h $\times$ $\mu\text{g/mL}$ )	93.33 (72.00–118.95)	393.75 (115.22–3908.18)	0.009
$MRT_{\infty}$ (h)	11.30 (10.44–12.19)	24.16 (12.23–85.36)	0.006
$T_{1/2}$ (h)	8.23 (7.90–8.58)	17.31 (8.59–64.05)	0.006
E	0.008 (0.006–0.01)	0.004 (0.003–0.006)	0.009

Results are presented in geometric means and 95% confidence intervals. P-values are based on non-parametric Wilcoxon Rank Sums 2-sample normal approximation.

Parameters include maximum plasma concentration ( $C_{max}$ ), time of  $C_{max}$  ( $T_{max}$ ), area under the curve extrapolated to infinity ( $AUC_{\infty}$ ), area under the first momentum curve extrapolated to infinity ( $AUMC_{\infty}$ ), area under the curve percent extrapolated ( $AUC_{\%extrapolated}$ ), slope of terminal phase ( $\lambda_z$ ), terminal half-life ( $T_{1/2}$ ), volume of distribution ( $V_d$ ), mean residence time ( $MRT_{\infty}$ ), and clearance (CL).

**TABLE 5 |** Plasma pharmacokinetic parameters for meloxicam from six post-partum cows matched to mid-lactation cows orally administered a single dose of meloxicam at 1.0 mg/kg.

Oral	Mid-lactation	Post-partum	P-value
$C_{max}$ ( $\mu\text{g/mL}$ )	1.45 (1.12–1.88)	2.61 (1.79–3.67)	0.02
$T_{max}$ (h)	10.48 (8.50–12.83)	16.75 (12.25–22.42)	0.02
$V_z/F$ (L/kg)	0.39 (0.27–0.60)	0.22 (0.17–0.33)	0.02
CL/F (L/kg/h)	0.03 (0.02–0.04)	0.01 (0.007–0.019)	0.008
$AUC_{\infty}$ (h $\times$ $\mu\text{g/mL}$ )	36.01 (24.29–51.02)	82.82 (50.55–126.77)	0.008
$AUC_{\%extrapolated}$	0.60 (–0.09–1.89)	0.47 (0.17–0.89)	0.69
$\lambda_z$ ( $\text{h}^{-1}$ )	0.07 (0.06–0.08)	0.06 (0.05–0.07)	0.05
$AUMC_{\infty}$ (h $\times$ $\mu\text{g/mL}$ )	733.95 (394.66–1194.39)	2287.61 (981.54–4354.35)	0.008
$MRT_{\infty}$ (h)	20.38 (17.16–24.02)	27.62 (21.56–34.90)	0.05
$T_{1/2}$ (h)	9.55 (8.26–10.99)	12.28 (9.60–15.42)	0.05
F (%)	87.2	101.6	–*

Results are presented in geometric means and range. P-values are based on non-parametric Wilcoxon Rank Sums 2-sample normal approximation.

Parameters include maximum plasma concentration ( $C_{max}$ ), time of  $C_{max}$  ( $T_{max}$ ), area under the curve extrapolated to infinity ( $AUC_{\infty}$ ), area under the curve percent extrapolated ( $AUC_{\%extrapolated}$ ), area under the first momentum curve to infinity ( $AUMC_{\infty}$ ), slope of terminal phase ( $\lambda_z$ ), terminal half-life ( $T_{1/2}$ ), volume of distribution per fraction of drug absorbed ( $V_z/F$ ), mean residence time ( $MRT_{\infty}$ ), clearance per fraction of drug absorbed (CL/F), and absolute bioavailability ( $F_{abs}$ ).

\*Statistical comparisons could not be made between treatment groups due individual animals receiving a single treatment and therefore clearance cannot be assumed to be consistent.