

## Effect of prophylactic calcium supplementation on regulators of calcium homeostasis in multiparous Holstein cows

Table 1: Mean and associated 95% confidence interval for serum tCa, PTH, and milk yield for multiparous Holsteins classified into 1 of 4 treatment groups sampled every 8 h through 96 h postpartum and at 120 h and 168 h.

item	CON	SQ	BOL-C	BOL-D
tCa, mmol/L	2.18 <sup>a</sup> [2.12, 2.24]	2.08 <sup>b</sup> [2.02, 2.13]	2.20 <sup>a</sup> [2.15, 2.26]	2.20 <sup>a</sup> [2.12, 2.26]
0 hr Ca, mmol/L	2.07 [1.97, 2.16]	2.08 [1.99, 2.17]	2.03 [1.94, 2.12]	2.06 [1.95, 2.17]
PTH, pg/mL	1458.7 [1366.6, 1550.8]	1396.5 [1308.2, 1484.8]	1473.9 [1385.2, 1562.7]	1487.4 [1388.3, 1586.5]
0 hr PTH, pg/mL	1055.0 <sup>a</sup> [1003.9, 1106.2]	968.8 <sup>ab</sup> [919.6, 1018.0]	903.7 <sup>b</sup> [854.8, 952.7]	950.9 <sup>b</sup> [895.7, 1006.2]
Milk yield, kg				
wk 2	111.9 [102.9, 121.2]	105.2 [96.6, 114.2]	105.8 [97.3, 114.6]	112.0 [102.3, 122.1]
wk 4	118.7 [107.8, 130.2]	109.1 [98.8, 120.0]	114.1 [103.7, 125.0]	112.0 [100.3, 124.4]

Table 2: *P*-values for mean serum tCa, PTH, and milk yield including the fixed effects of time, trt, baseline tCa or PTH, parity group, and interaction of time x trt for multiparous Holsteins classified into 1 of 4 treatment groups samples every 8 h through 96 h postpartum and at 120 h and 168 h.

item	Hr	TRT	PARGRP <sup>1</sup>	BLCa <sup>2</sup>	BLPTH <sup>3</sup>	Milking Time <sup>4</sup>	TRT×H r	PARGRP×TR T
	<0.00							
tCa, mmol/L	1	0.009	0.06	0.05	-	-	<0.001	0.7
0 hr Ca, mmol/L	-	0.9	<0.001	-	-	-	-	0.7
	<0.00							
PTH, pg/mL	1	0.5	0.09	-	0.02	<0.001	0.3	0.5
		<0.00						
0 hr PTH, pg/mL	-	1	<0.001	-	-	-	-	<0.001
Milk yield, kg								
wk 2	-	0.6	0.5	0.3	-	-	-	-
wk 4	-	0.6	0.9	0.3	-	-	-	-

<sup>a, b</sup>denote differences between mean estimates where  $P < 0.08$

<sup>1</sup>Parity group; 2, 3, and  $\geq 4$

<sup>2</sup>Baseline serum tCa at 0 h post calving

<sup>3</sup>Baseline serum PTH at 0 h post calving

<sup>4</sup>Milking time; M1: 0230, M2: 1030, & M3: 1830