

Black Cohosh Chronic Perinatal Study-Rats (C00058-03)

Table 2: PND 4 and 21 Live Litter Size and Survival

Parameter ^d	Control	75 mg/kg	250 mg/kg	750 mg/kg	Trend ^a
Live Per Litter^b					
PND4 Precull Male ^{j,k}	6.61 ± 0.30 [28]	6.26 ± 0.53 [23]	6.38 ± 0.47 [24]	6.09 ± 0.40 [33]	0.283-
PND4 Precull Female ^{j,k}	6.57 ± 0.38 [28]	5.83 ± 0.51 [23]	6.29 ± 0.42 [24]	5.52 ± 0.35 [33]	0.135-
PND4 Precull Total ^l	13.23 ± 0.40 [30]	12.39 ± 0.60 [31]	12.84 ± 0.42 [32]	11.34 ± 0.51 [35]**	0.004-
PND4 Postcull Male	4.07 ± 0.07 [30]	4.10 ± 0.10 [30]	4.03 ± 0.06 [30]	4.17 ± 0.14 [30]	0.772+
PND4 Postcull Female	3.93 ± 0.07 [30]	3.90 ± 0.10 [30]	3.97 ± 0.06 [30]	3.83 ± 0.14 [30]	0.772-
PND4 Postcull Total	8.00 ± 0.00 [30]	8.00 ± 0.00 [30]	8.00 ± 0.00 [30]	8.00 ± 0.00 [30]	1.000+
PND7 Male + Female	8.00 ± 0.00 [30]	8.00 ± 0.00 [30]	8.00 ± 0.00 [30]	7.97 ± 0.03 [30]	0.180-
PND10 Male + Female	8.00 ± 0.00 [30]	8.00 ± 0.00 [30]	7.73 ± 0.27 [30]	7.93 ± 0.05 [30]	0.071-
PND14 Male + Female	7.93 ± 0.05 [30]	7.97 ± 0.03 [30]	7.73 ± 0.27 [30]	7.80 ± 0.09 [30]	0.164-
PND17 Male + Female	7.93 ± 0.05 [30]	7.97 ± 0.03 [30]	7.73 ± 0.27 [30]	7.80 ± 0.09 [30]	0.164-
PND21 Male	4.03 ± 0.06 [30]	4.07 ± 0.11 [30]	3.90 ± 0.15 [30]	4.07 ± 0.14 [30]	0.956-
PND21 Female	3.90 ± 0.07 [30]	3.90 ± 0.10 [30]	3.83 ± 0.14 [30]	3.73 ± 0.14 [30]	0.342-
PND21 Male + Female	7.93 ± 0.05 [30]	7.97 ± 0.03 [30]	7.73 ± 0.27 [30]	7.80 ± 0.09 [30]	0.164-
PND25 Male	4.03 ± 0.06 [30]	4.07 ± 0.11 [30]	3.90 ± 0.15 [30]	4.07 ± 0.14 [30]	0.956-
PND25 Female	3.90 ± 0.07 [30]	3.90 ± 0.10 [30]	3.83 ± 0.14 [30]	3.73 ± 0.14 [30]	0.342-
PND25 Male + Female	7.93 ± 0.05 [30]	7.97 ± 0.03 [30]	7.73 ± 0.27 [30]	7.80 ± 0.09 [30]	0.164-
PND28 Male	4.03 ± 0.06 [30]	4.03 ± 0.10 [30]	3.90 ± 0.15 [30]	3.93 ± 0.20 [30]	0.782-
PND28 Female	3.87 ± 0.08 [30]	3.90 ± 0.10 [30]	3.83 ± 0.14 [30]	3.60 ± 0.19 [30]	0.330-
PND28 Male + Female	7.90 ± 0.06 [30]	7.93 ± 0.05 [30]	7.73 ± 0.27 [30]	7.53 ± 0.27 [30]	0.259-
% Male^{j,k}					
% Male in Dose PND4 Precull ^{c,e}	50.1 [369]	51.8 [278]	50.3 [304]	52.5 [383]	
% Male in Litter PND4 Precull ^b	50.5 ± 2.1 [28]	49.6 ± 3.6 [23]	49.9 ± 2.8 [24]	51.9 ± 2.9 [33]	0.943+
Survival					
Total Dead PND1-4 ^{e,f,j}	9 [3]	4 [4]	8 [7]	12 [9]	
Total Dead PND4-28 ^{e,f}	3 [3]	2 [2]	8 [1]	14 [6]	
Dead/Litter PND1-4 ^{b,g,j}	0.29 ± 0.18 [31]	0.13 ± 0.06 [31]	0.25 ± 0.09 [32]	0.34 ± 0.12 [35]	0.075+
Dead/Litter PND4-28 ^{b,g}	0.10 ± 0.06 [30]	0.07 ± 0.05 [30]	0.27 ± 0.27 [30]	0.47 ± 0.27 [30]	0.259+
Survival 1-4 ^{b,h,j}	1.000 ± 0.000 [30]	0.995 ± 0.004 [31]	0.991 ± 0.006 [32]	0.965 ± 0.029 [35]	0.070-
Survival 4-28 ^{b,i}	0.988 ± 0.007 [30]	0.992 ± 0.006 [30]	0.967 ± 0.033 [30]	0.942 ± 0.034 [30]	0.259-

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- a: P-value and direction of trend
- b: Each dose was compared to the control with Shirley's test when a trend was present ($P < .01$ from Jonckheere's trend test) or with Dunn's test when no trend was present [$* = P < 0.05$, $** = P < 0.01$]
- c: $100 \times (\text{Number of live males in dose group}) / (\text{Number of live males and females in dose group})$ [Number of pups]
- d: Mean \pm standard error [Number of litters] unless otherwise specified
- e: No statistics were performed on this endpoint
- f: Number of dead pups in dose [Number of litters with dead pups]
- g: Number of dead per litter
- h: Survival per litter: Number of live pups PND 4 precull / Number of live pups on PND 1
- i: Survival per litter: Number of live pups PND 28 / Number of live pups on PND 4 postcull
- j: Litters that had differing total counts on PND 1 and PND 4 not included
- k: Litters where the male/female pup counts were inconsistent between PND 1 and PND 4 were excluded from the male/female-specific endpoints.