

Table 7: Comparison of Abnormal Estrous Cycling
Low BPA Dose Groups –vs– Vehicle Controls

		Low BPA								
Unweighted Cochran-Armitage Test	Estrous Cycling Response	Vehicle	BPA 2.5	BPA 8.0	BPA 25.0	BPA 80.0	BPA 260	BPA 840	BPA 2700	Low BPA Total
Any Abnormal Cycling	Normal	13	18	10	11	15	13	6	9	95
	Abnormal	7	5	8	10	5	8	14	11	68
	Total	20	23	18	21	20	21	20	20	163
	EX P-Value	0.016 *	0.485	0.742	0.526	0.729	1.000	0.058	0.339	
Extended Estrus	Normal	20	23	18	21	20	21	20	20	163
	Extended									
	Total	20	23	18	21	20	21	20	20	163
	EX P-Value	----	----	----	----	----	----	----	----	
Extended Combined Estrus	Normal	20	23	18	21	20	21	20	20	163
	Extended									
	Total	20	23	18	21	20	21	20	20	163
	EX P-Value	----	----	----	----	----	----	----	----	
Extended Diestrus	Normal	13	18	11	12	15	13	6	10	98
	Extended	7	5	7	9	5	8	14	10	65
	Total	20	23	18	21	20	21	20	20	163
	EX P-Value	0.019 *	0.491	1.000	0.756	0.728	1.000	0.055	0.530	
Excessive E/D	Normal	20	23	18	21	20	21	20	19	162
	Extended	0	0	0	0	0	0	0	1	1
	Total	20	23	18	21	20	21	20	20	163
	EX P-Value	0.114	----	----	----	----	----	----	1.000	

Table 8: Comparison of Abnormal Estrous Cycling
High BPA Dose Groups –vs– Vehicle Controls

Unweighted Cochran-Armitage Test	Estrous Cycling Response	High BPA			
		Vehicle	BPA 100K	BPA 300K	High BPA Total
Any Abnormal Cycling	Normal	13	14	2	29
	Abnormal	7	7	17	31
	Total	20	21	19	60
	EX P-Value	<.001 ***	1.000	0.001 **	
Extended Estrus	Normal	20	21	13	54
	Extended	0	0	6	6
	Total	20	21	19	60
	EX P-Value	<.001 ***	----	0.007 **	
Extended Combined Estrus	Normal	20	21	14	55
	Extended	0	0	5	5
	Total	20	21	19	60
	EX P-Value	0.002 **	----	0.021 *	
Extended Diestrus	Normal	13	14	12	39
	Extended	7	7	7	21
	Total	20	21	19	60
	EX P-Value	1.000	1.000	1.000	
Excessive E/D	Normal	20	21	14	55
	Extended	0	0	5	5
	Total	20	21	19	60
	EX P-Value	0.002 **	----	0.021 *	

Table 9: Comparison of Abnormal Estrous Cycling
Ethynyl Estradiol Dose Groups –vs– Vehicle Controls

Unweighted Cochran-Armitage Test	Estrous Cycling Response	Ethynyl Estradiol			
		Vehicle	EE 0.5	EE 5.0	EE Total
Any Abnormal Cycling	Normal	13	1	0	14
	Abnormal	7	18	19	44
	Total	20	19	19	58
	EX P-Value	<.001 ***	<.001 ***	<.001 ***	
Extended Estrus	Normal	20	9	9	38
	Extended	0	10	10	20
	Total	20	19	19	58
	EX P-Value	<.001 ***	<.001 ***	<.001 ***	
Extended Combined Estrus	Normal	20	10	8	38
	Extended	0	9	11	20
	Total	20	19	19	58
	EX P-Value	<.001 ***	<.001 ***	<.001 ***	
Extended Diestrus	Normal	13	16	11	40
	Extended	7	3	8	18
	Total	20	19	19	58
	EX P-Value	0.734	0.269	0.752	
Excessive E/D	Normal	20	8	13	41
	Extended	0	11	6	17
	Total	20	19	19	58
	EX P-Value	0.036 *	<.001 ***	0.008 **	

Table 10: Comparison of Abnormal Estrous Cycling
Naïve Controls –vs– Vehicle Controls
(Alternate Definition of Extended Diestrus: >4 consecutive days)

Unweighted Cochran-Armitage Test	Estrous Cycling Response	Naïve vs Vehicle		
		Vehicle	Naïve	Naïve Total
Any Abnormal Cycling	Normal	13	16	29
	Abnormal	7	4	11
	Total	20	20	40
	EX P-Value	0.481	0.483	
Extended Estrus	Normal	20	20	40
	Extended			
	Total	20	20	40
	EX P-Value	----	----	
Extended Combined Estrus	Normal	20	20	40
	Extended			
	Total	20	20	40
	EX P-Value	----	----	
Extended Diestrus	Normal	14	16	30
	Extended	6	4	10
	Total	20	20	40
	EX P-Value	0.723	0.700	
Excessive E/D	Normal	20	20	40
	Extended			
	Total	20	20	40
	EX P-Value	----	----	

Table 11: Comparison of Abnormal Estrous Cycling
Low BPA Dose Groups –vs– Vehicle Controls
(Alternate Definition of Extended Diestrus: >4 consecutive days)

		Low BPA							
Unweighted Cochran-Armitage Test	Estrous Cycling Response	Vehicle	BPA 2.5	BPA 8.0	BPA 25.0	BPA 80.0	BPA 260	BPA 840	BPA 2700
		Low BPA Total							
Any Abnormal Cycling	Normal	13	19	13	13	17	15	12	11
	Abnormal	7	4	5	8	3	6	8	9
	Total	20	23	18	21	20	21	20	20
	EX P-Value	0.213	0.291	0.743	1.000	0.274	0.743	1.000	0.750
Extended Estrus	Normal	20	23	18	21	20	21	20	20
	Extended								
	Total	20	23	18	21	20	21	20	20
Extended Combined Estrus	Normal	20	23	18	21	20	21	20	20
	Extended								
	Total	20	23	18	21	20	21	20	20
Extended Diestrus	Normal	14	19	14	15	17	15	12	13
	Extended	6	4	4	6	3	6	8	7
	Total	20	23	18	21	20	21	20	20
Excessive E/D	Normal	20	23	18	21	20	21	20	19
	Extended	0	0	0	0	0	0	0	1
	Total	20	23	18	21	20	21	20	20
	EX P-Value	0.125	----	----	----	----	----	----	1.000

Table 12: Comparison of Abnormal Estrous Cycling
High BPA Dose Groups –vs– Vehicle Controls
(Alternate Definition of Extended Diestrus: >4 consecutive days)

Unweighted Cochran-Armitage Test	Estrous Cycling Response	High BPA			
		Vehicle	BPA 100K	BPA 300K	High BPA Total
Any Abnormal Cycling	Normal	13	17	4	34
	Abnormal	7	4	15	26
	Total	20	21	19	60
	EX P-Value	0.011 *	0.301	0.010 **	
Extended Estrus	Normal	20	21	13	54
	Extended	0	0	6	6
	Total	20	21	19	60
	EX P-Value	<.001 ***	----	0.010 *	
Extended Combined Estrus	Normal	20	21	14	55
	Extended	0	0	5	5
	Total	20	21	19	60
	EX P-Value	0.002 **	----	0.019 *	
Extended Diestrus	Normal	14	17	14	45
	Extended	6	4	5	15
	Total	20	21	19	60
	EX P-Value	0.857	0.472	1.000	
Excessive E/D	Normal	20	21	14	55
	Extended	0	0	5	5
	Total	20	21	19	60
	EX P-Value	0.003 **	----	0.021 *	

Table 13: Comparison of Abnormal Estrous Cycling
Ethynyl Estradiol Dose Groups –vs– Vehicle Controls
(Alternate Definition of Extended Diestrus: >4 consecutive days)

Unweighted Cochran-Armitage Test	Estrous Cycling Response	Ethynyl Estradiol			
		Vehicle	EE 0.5	EE 5.0	EE Total
Any Abnormal Cycling	Normal	13	1	0	14
	Abnormal	7	18	19	44
	Total	20	19	19	58
	EX P-Value	<.001 ***	<.001 ***	<.001 ***	
Extended Estrus	Normal	20	9	9	38
	Extended	0	10	10	20
	Total	20	19	19	58
	EX P-Value	<.001 ***	<.001 ***	<.001 ***	
Extended Combined Estrus	Normal	20	10	8	38
	Extended	0	9	11	20
	Total	20	19	19	58
	EX P-Value	<.001 ***	<.001 ***	<.001 ***	
Extended Diestrus	Normal	14	16	12	42
	Extended	6	3	7	16
	Total	20	19	19	58
	EX P-Value	0.725	0.455	0.734	
Excessive E/D	Normal	20	8	13	41
	Extended	0	11	6	17
	Total	20	19	19	58
	EX P-Value	0.029 *	<.001 ***	0.008 **	