Test Type: CHRONIC Route: GAVAGE

Species/Strain: RATS/HSD

P08: STATISTICAL ANALYSIS OF PRIMARY TUMORS

Black Cohosh

CAS Number: 84776-26-1

Date Report Requested: 09/06/2021 Time Report Requested: 15:59:32 First Dose M/F: 07/03/12 / 07/02/12

Lab: BAT

Custom Report with Litter-Based Statistics

NTP Study Number: C00058B

Lock Date: 10/02/2018

Cage Range: ALL

Date Range: ALL

Reasons For Removal: ALL

Removal Date Range: ALL

Include ALL **Treatment Groups:**

Study Gender: Both

TDMSE Version: 2.5.0.0_SFH

PWG Approval Date: NONE

Test Type: CHRONIC Route: GAVAGE

Species/Strain: RATS/HSD

P08: STATISTICAL ANALYSIS OF PRIMARY TUMORS

Black Cohosh CAS Number: 84776-26-1

Date Report Requested: 09/06/2021 Time Report Requested: 15:59:32 First Dose M/F: 07/03/12 / 07/02/12

Lab: BAT

FOR ALL DOSES THE TUMOR RATES IN THE FOLLOWING TISSUES/ORGANS ARE BASED ON NUMBER OF TISSUES EXAMINED. IN OTHER TISSUES/ORGANS RATES ARE BASED ON THE NUMBER OF ANIMALS NECROPSIED.

Adrenal Cortex

Adrenal Medulla

Brain

Clitoral/Preputial Gland

Islets, Pancreatic

Kidney

Liver

Pancreas

Pituitary Gland

Thyroid Gland

Uterus (excluding Uterus, Cervix)

Uterus (including Uterus, Cervix)

Test Type: CHRONIC Route: GAVAGE

Species/Strain: RATS/HSD

P08: STATISTICAL ANALYSIS OF PRIMARY TUMORS

Black Cohosh CAS Number: 84776-26-1

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Lab: BAT

SUMMARY OF STATISTICALLY SIGNIFICANT (P<=.05) RESULTS IN THE ANALYSIS OF BLACK COHOSH

MALE RATS

Organ

Adrenal Medulla

FEMALE RATS

Organ

Mammary Gland

Uterus (excluding Uterus, Cervix)

Uterus (including Uterus, Cervix)

All Organs

Morphology

Pheochromocytoma Benign

Pheochromocytoma: Benign, Complex, Malignant, NOS

Morphology

Fibroadenoma

Fibroma, Fibroadenoma or Adenoma

Fibroma, Fibroadenoma, Carcinoma, or Adenoma

Leiomyoma, Leiomyosarcoma, Polyp Stromal, Sarcoma, Sarcoma Stromal, or Schwannoma Malignant

Polyp Stromal

Leiomyoma, Leiomyosarcoma, Polyp Stromal, Sarcoma, Sarcoma Stromal, or Schwannoma Malignant

Polyp Stromal Benign Tumors Malignant Tumors

Malignant and Benign Tumors

Test Type: CHRONIC Route: GAVAGE

Species/Strain: RATS/HSD

P08: STATISTICAL ANALYSIS OF PRIMARY TUMORS

Black Cohosh
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Lab: BAT

DOSE	0 mg/kg male	75 mg/kg male	250 mg/kg male	750 mg/kg male	
Adrenal Cortex Adenoma					
TUMOR RATES					
OVERALL (a)	0/50 (0%)	0/50 (0%)	1/50 (2%)	0/50 (0%)	
LITTERS (b)	0/25 (0%)	0/25 (0%)	1/25 (4%)	0/25 (0%)	
POLY-3 RATE (c)	0/38.56	0/37.00	1/39.36	0/37.21	
POLY-3 PERCENT (g)	0%	0%	2.5%	0%	
TERMINAL (d)	0/15 (0%)	0/15 (0%)	0/21 (0%)	0/16 (0%)	
FIRST INCIDENCE			558		
STATISTICAL TESTS					
POLY 3	(n)	(n)	(n)	(n)	
POLY 1.5	(n)	(n)	(n)	(n)	
POLY 6	(n)	(n)	(n)	(n)	
RAO-SCOTT	(n)	(n)	(n)	(n)	
LITTER C-A/FISHERS	(n)	(n)	(n)	(n)	

Test Type: CHRONIC Route: GAVAGE

Species/Strain: RATS/HSD

P08: STATISTICAL ANALYSIS OF PRIMARY TUMORS

Black Cohosh
CAS Number: 84776-26-1

Date Report Requested: 09/06/2021 Time Report Requested: 15:59:32 First Dose M/F: 07/03/12 / 07/02/12

Lab: BAT

Males					
DOSE	0 mg/kg male	75 mg/kg male	250 mg/kg male	750 mg/kg male	
Adrenal Medulla Pheochromocytoma Benign					
TUMOR RATES					
OVERALL (a)	14/50 (28%)	10/50 (20%)	6/50 (12%)	10/50 (20%)	
LITTERS (b)	12/25 (48%)	10/25 (40%)	6/25 (24%)	9/25 (36%)	
POLY-3 RATE (c)	14/40.56	10/37.85	6/39.15	10/38.91	
POLY-3 PERCENT (g)	34.5%	26.4%	15.3%	25.7%	
TERMINAL (d)	7/15 (47%)	5/15 (33%)	3/21 (14%)	4/16 (25%)	
FIRST INCIDENCE	562	654	664	520	
STATISTICAL TESTS					
POLY 3	P=0.321N	P=0.293N	P=0.038N*	P=0.266N	
POLY 1.5	P=0.319N	P=0.267N	P=0.038N*	P=0.250N	
POLY 6	P=0.324N	P=0.326N	P=0.036N*	P=0.284N	
RAO-SCOTT	P=0.328N	P=0.289N	P=0.044N*	P=0.264N	
LITTER C-A/FISHERS	P=0.311N	P=0.388N	P=0.070N	P=0.284N	

Test Type: CHRONIC Route: GAVAGE

Species/Strain: RATS/HSD

P08: STATISTICAL ANALYSIS OF PRIMARY TUMORS

Black Cohosh
CAS Number: 84776-26-1

Date Report Requested: 09/06/2021 Time Report Requested: 15:59:32 First Dose M/F: 07/03/12 / 07/02/12

Lab: BAT

			Males		
DOSE	0 mg/kg male	75 mg/kg male	250 mg/kg male	750 mg/kg male	
Adrenal Medulla Pheochromocytoma: Benig	n, Complex, Malignant, I	NOS			
TUMOR RATES					
OVERALL (a)	14/50 (28%)	10/50 (20%)	6/50 (12%)	11/50 (22%)	
LITTERS (b)	12/25 (48%)	10/25 (40%)	6/25 (24%)	10/25 (40%)	
POLY-3 RATE (c)	14/40.56	10/37.85	6/39.15	11/39.30	
POLY-3 PERCENT (g)	34.5%	26.4%	15.3%	28%	
TERMINAL (d)	7/15 (47%)	5/15 (33%)	3/21 (14%)	4/16 (25%)	
FIRST INCIDENCE	562	654	664	520	
STATISTICAL TESTS					
POLY 3	P=0.429N	P=0.293N	P=0.038N*	P=0.346N	
POLY 1.5	P=0.428N	P=0.267N	P=0.038N*	P=0.331N	
POLY 6	P=0.427N	P=0.326N	P=0.036N*	P=0.360N	
RAO-SCOTT	P=0.429N	P=0.288N	P=0.043N*	P=0.339N	
LITTER C-A/FISHERS	P=0.440N	P=0.388N	P=0.070N	P=0.388N	

Test Type: CHRONIC Route: GAVAGE

Species/Strain: RATS/HSD

P08: STATISTICAL ANALYSIS OF PRIMARY TUMORS

Black Cohosh
CAS Number: 84776-26-1

Date Report Requested: 09/06/2021 Time Report Requested: 15:59:32 First Dose M/F: 07/03/12 / 07/02/12

Lab: BAT

	Males					
DOSE	0 mg/kg male	75 mg/kg male	250 mg/kg male	750 mg/kg male		
Brain Granular Cell Tumor Benigr	1					
TUMOR RATES						
OVERALL (a)	3/50 (6%)	0/50 (0%)	1/49 (2%)	1/50 (2%)		
LITTERS (b)	3/25 (12%)	0/25 (0%)	1/25 (4%)	1/25 (4%)		
POLY-3 RATE (c)	3/39.02	0/37.00	1/38.62	1/37.75		
POLY-3 PERCENT (g)	7.7%	0%	2.6%	2.7%		
TERMINAL (d)	1/15 (7%)	0/15 (0%)	1/21 (5%)	0/16 (0%)		
FIRST INCIDENCE	646		730 (T)	564		
STATISTICAL TESTS						
POLY 3	P=0.435N	P=0.127N	P=0.308N	P=0.316N		
POLY 1.5	P=0.437N	P=0.123N	P=0.309N	P=0.310N		
POLY 6	P=0.431N	P=0.132N	P=0.301N	P=0.323N		
RAO-SCOTT	P=0.449N	P=0.157N	P=0.331N	P=0.335N		
LITTER C-A/FISHERS	P=0.441N	P=0.117N	P=0.305N	P=0.305N		

Test Type: CHRONIC Route: GAVAGE

Species/Strain: RATS/HSD

P08: STATISTICAL ANALYSIS OF PRIMARY TUMORS

Black Cohosh
CAS Number: 84776-26-1

Date Report Requested: 09/06/2021 Time Report Requested: 15:59:32 First Dose M/F: 07/03/12 / 07/02/12

Lab: BAT

			Males	
DOSE	0 mg/kg male	75 mg/kg male	250 mg/kg male	750 mg/kg male
Clitoral/Preputial Gland Squamous Cell Carcinoma				
TUMOR RATES				
OVERALL (a)	0/50 (0%)	0/50 (0%)	0/50 (0%)	0/50 (0%)
LITTERS (b)	0/25 (0%)	0/25 (0%)	0/25 (0%)	0/25 (0%)
POLY-3 RATE (c)	0/38.56	0/37.00	0/38.80	0/37.21
POLY-3 PERCENT (g)	0%	0%	0%	0%
TERMINAL (d)	0/15 (0%)	0/15 (0%)	0/21 (0%)	0/16 (0%)
FIRST INCIDENCE				
STATISTICAL TESTS				
POLY 3	(n)	(n)	(n)	(n)
POLY 1.5	(n)	(n)	(n)	(n)
POLY 6	(n)	(n)	(n)	(n)
RAO-SCOTT	(n)	(n)	(n)	(n)
LITTER C-A/FISHERS	(n)	(n)	(n)	(n)

Test Type: CHRONIC Route: GAVAGE

Species/Strain: RATS/HSD

P08: STATISTICAL ANALYSIS OF PRIMARY TUMORS

Black Cohosh CAS Number: 84776-26-1

Date Report Requested: 09/06/2021 Time Report Requested: 15:59:32 First Dose M/F: 07/03/12 / 07/02/12

Lab: BAT

Males					
DOSE	0 mg/kg male	75 mg/kg male	250 mg/kg male	750 mg/kg male	
Intestine Small: Jejunum Carcinoma					
TUMOR RATES	#	#	#	#	
OVERALL (a)	0/50 (0%)	2/50 (4%)	0/50 (0%)	0/50 (0%)	
LITTERS (b)	0/25 (0%)	2/25 (8%)	0/25 (0%)	0/25 (0%)	
POLY-3 RATE (c)	0/38.56	2/37.20	0/38.80	0/37.21	
POLY-3 PERCENT (g)	0%	5.4%	0%	0%	
TERMINAL (d)	0/15 (0%)	0/15 (0%)	0/21 (0%)	0/16 (0%)	
FIRST INCIDENCE		680			
STATISTICAL TESTS					
POLY 3	P=0.379N	P=0.228	(e)	(e)	
POLY 1.5	P=0.373N	P=0.233	(e)	(e)	
POLY 6	P=0.384N	P=0.224	(e)	(e)	
RAO-SCOTT	P=0.455N	P=0.345	(e)	(e)	
LITTER C-A/FISHERS	P=0.368N	P=0.245	(e)	(e)	

Test Type: CHRONIC Route: GAVAGE

Species/Strain: RATS/HSD

P08: STATISTICAL ANALYSIS OF PRIMARY TUMORS

Black Cohosh

CAS Number: 84776-26-1

Date Report Requested: 09/06/2021 Time Report Requested: 15:59:32 First Dose M/F: 07/03/12 / 07/02/12

Lab: BAT

			Males		
DOSE	0 mg/kg male	75 mg/kg male	250 mg/kg male	750 mg/kg male	
ntestine Small: Site Unspe Carcinoma	cified				
TUMOR RATES	#	#	#	#	
OVERALL (a)	0/50 (0%)	2/50 (4%)	0/50 (0%)	0/50 (0%)	
LITTERS (b)	0/25 (0%)	2/25 (8%)	0/25 (0%)	0/25 (0%)	
POLY-3 RATE (c)	0/38.56	2/37.20	0/38.80	0/37.21	
POLY-3 PERCENT (g)	0%	5.4%	0%	0%	
TERMINAL (d)	0/15 (0%)	0/15 (0%)	0/21 (0%)	0/16 (0%)	
FIRST INCIDENCE		680			
STATISTICAL TESTS					
POLY 3	P=0.379N	P=0.228	(e)	(e)	
POLY 1.5	P=0.373N	P=0.233	(e)	(e)	
POLY 6	P=0.384N	P=0.224	(e)	(e)	
RAO-SCOTT	P=0.455N	P=0.345	(e)	(e)	
LITTER C-A/FISHERS	P=0.368N	P=0.245	(e)	(e)	

Test Type: CHRONIC Route: GAVAGE

Species/Strain: RATS/HSD

P08: STATISTICAL ANALYSIS OF PRIMARY TUMORS

Black Cohosh

CAS Number: 84776-26-1

Date Report Requested: 09/06/2021 Time Report Requested: 15:59:32 First Dose M/F: 07/03/12 / 07/02/12

Lab: BAT

			Males		
DOSE	0 mg/kg male	75 mg/kg male	250 mg/kg male	750 mg/kg male	
Islets, Pancreatic Adenoma					
TUMOR RATES					
OVERALL (a)	4/50 (8%)	1/50 (2%)	2/50 (4%)	1/50 (2%)	
LITTERS (b)	3/25 (12%)	1/25 (4%)	2/25 (8%)	1/25 (4%)	
POLY-3 RATE (c)	4/38.56	1/37.00	2/38.97	1/37.56	
POLY-3 PERCENT (g)	10.4%	2.7%	5.1%	2.7%	
TERMINAL (d)	4/15 (27%)	1/15 (7%)	1/21 (5%)	0/16 (0%)	
FIRST INCIDENCE	730 (T)	730 (T)	688	632	
STATISTICAL TESTS					
POLY 3	P=0.235N	P=0.189N	P=0.331N	P=0.184N	
POLY 1.5	P=0.236N	P=0.184N	P=0.334N	P=0.181N	
POLY 6	P=0.233N	P=0.193N	P=0.316N	P=0.186N	
RAO-SCOTT	P=0.285N	P=0.242N	P=0.372N	P=0.238N	
LITTER C-A/FISHERS	P=0.341N	P=0.305N	P=0.500N	P=0.305N	

Test Type: CHRONIC Route: GAVAGE

Species/Strain: RATS/HSD

P08: STATISTICAL ANALYSIS OF PRIMARY TUMORS

Black Cohosh

CAS Number: 84776-26-1

Date Report Requested: 09/06/2021 Time Report Requested: 15:59:32 First Dose M/F: 07/03/12 / 07/02/12

Lab: BAT

			Males		
DOSE	0 mg/kg male	75 mg/kg male	250 mg/kg male	750 mg/kg male	
Islets, Pancreatic Carcinoma or Adenoma					
TUMOR RATES					
OVERALL (a)	4/50 (8%)	1/50 (2%)	2/50 (4%)	2/50 (4%)	
LITTERS (b)	3/25 (12%)	1/25 (4%)	2/25 (8%)	2/25 (8%)	
POLY-3 RATE (c)	4/38.56	1/37.00	2/38.97	2/37.61	
POLY-3 PERCENT (g)	10.4%	2.7%	5.1%	5.3%	
TERMINAL (d)	4/15 (27%)	1/15 (7%)	1/21 (5%)	0/16 (0%)	
FIRST INCIDENCE	730 (T)	730 (T)	688	632	
STATISTICAL TESTS					
POLY 3	P=0.454N	P=0.189N	P=0.331N	P=0.347N	
POLY 1.5	P=0.454N	P=0.184N	P=0.334N	P=0.341N	
POLY 6	P=0.452N	P=0.193N	P=0.316N	P=0.350N	
RAO-SCOTT	P=0.469N	P=0.229N	P=0.361N	P=0.373N	
LITTER C-A/FISHERS	P=0.587N	P=0.305N	P=0.500N	P=0.500N	

Test Type: CHRONIC Route: GAVAGE

Species/Strain: RATS/HSD

P08: STATISTICAL ANALYSIS OF PRIMARY TUMORS

Black Cohosh

CAS Number: 84776-26-1

Date Report Requested: 09/06/2021 Time Report Requested: 15:59:32 First Dose M/F: 07/03/12 / 07/02/12

Lab: BAT

	Males					
DOSE	0 mg/kg male	75 mg/kg male	250 mg/kg male	750 mg/kg male		
Kidney: Renal Tubule Amphophilic/Vacuolar Ader	noma					
TUMOR RATES						
OVERALL (a)	0/50 (0%)	0/50 (0%)	2/50 (4%)	2/50 (4%)		
LITTERS (b)	0/25 (0%)	0/25 (0%)	1/25 (4%)	1/25 (4%)		
POLY-3 RATE (c)	0/38.56	0/37.00	2/40.41	2/38.54		
POLY-3 PERCENT (g)	0%	0%	5%	5.2%		
TERMINAL (d)	0/15 (0%)	0/15 (0%)	0/21 (0%)	0/16 (0%)		
FIRST INCIDENCE			413	434		
STATISTICAL TESTS						
POLY 3	P=0.125	(e)	P=0.247	P=0.236		
POLY 1.5	P=0.125	(e)	P=0.243	P=0.238		
POLY 6	P=0.126	(e)	P=0.256	P=0.235		
RAO-SCOTT	P=0.313	(e)	P=0.499	P=0.482		
LITTER C-A/FISHERS	P=0.302	(e)	P=0.500	P=0.500		

Test Type: CHRONIC Route: GAVAGE

Species/Strain: RATS/HSD

P08: STATISTICAL ANALYSIS OF PRIMARY TUMORS

Black Cohosh

CAS Number: 84776-26-1

Date Report Requested: 09/06/2021 **Time Report Requested:** 15:59:32 **First Dose M/F:** 07/03/12 / 07/02/12

Lab: BAT

		Males					
DOSE	0 mg/kg male	75 mg/kg male	250 mg/kg male	750 mg/kg male			
Kidney: Renal Tubule Amphophilic/Vacuolar Carc	inoma						
TUMOR RATES							
OVERALL (a)	0/50 (0%)	0/50 (0%)	2/50 (4%)	1/50 (2%)			
LITTERS (b)	0/25 (0%)	0/25 (0%)	1/25 (4%)	1/25 (4%)			
POLY-3 RATE (c)	0/38.56	0/37.00	2/40.41	1/37.75			
POLY-3 PERCENT (g)	0%	0%	5%	2.7%			
TERMINAL (d)	0/15 (0%)	0/15 (0%)	0/21 (0%)	0/16 (0%)			
FIRST INCIDENCE			413	564			
STATISTICAL TESTS							
POLY 3	P=0.348	(e)	P=0.247	P=0.496			
POLY 1.5	P=0.351	(e)	P=0.243	P=0.498			
POLY 6	P=0.348	(e)	P=0.256	P=0.494			
RAO-SCOTT	P=0.476	(e)	P=0.446	P=0.663			
LITTER C-A/FISHERS	P=0.302	(e)	P=0.500	P=0.500			

Test Type: CHRONIC Route: GAVAGE

Species/Strain: RATS/HSD

P08: STATISTICAL ANALYSIS OF PRIMARY TUMORS

Black Cohosh

CAS Number: 84776-26-1

Date Report Requested: 09/06/2021 Time Report Requested: 15:59:32 First Dose M/F: 07/03/12 / 07/02/12

Lab: BAT

			Males		
DOSE	0 mg/kg male	75 mg/kg male	250 mg/kg male	750 mg/kg male	
Liver Hepatocellular Adenoma					
TUMOR RATES					
OVERALL (a)	0/50 (0%)	1/50 (2%)	0/50 (0%)	2/50 (4%)	
LITTERS (b)	0/25 (0%)	1/25 (4%)	0/25 (0%)	2/25 (8%)	
POLY-3 RATE (c)	0/38.56	1/37.00	0/38.80	2/37.57	
POLY-3 PERCENT (g)	0%	2.7%	0%	5.3%	
TERMINAL (d)	0/15 (0%)	1/15 (7%)	0/21 (0%)	0/16 (0%)	
FIRST INCIDENCE		730 (T)		650	
STATISTICAL TESTS					
POLY 3	P=0.147	P=0.492	(e)	P=0.231	
POLY 1.5	P=0.149	P=0.496	(e)	P=0.234	
POLY 6	P=0.144	P=0.488	(e)	P=0.227	
RAO-SCOTT	P=0.206	P=0.529	(e)	P=0.295	
LITTER C-A/FISHERS	P=0.149	P=0.500	(e)	P=0.245	

Test Type: CHRONIC Route: GAVAGE

Species/Strain: RATS/HSD

P08: STATISTICAL ANALYSIS OF PRIMARY TUMORS

Black Cohosh

CAS Number: 84776-26-1

Date Report Requested: 09/06/2021 Time Report Requested: 15:59:32 First Dose M/F: 07/03/12 / 07/02/12

Lab: BAT

			Males		
DOSE	0 mg/kg male	75 mg/kg male	250 mg/kg male	750 mg/kg male	
Mammary Gland Carcinoma					
TUMOR RATES	#	#	#	#	
OVERALL (a)	0/50 (0%)	1/50 (2%)	0/50 (0%)	0/50 (0%)	
LITTERS (b)	0/25 (0%)	1/25 (4%)	0/25 (0%)	0/25 (0%)	
POLY-3 RATE (c)	0/38.56	1/37.00	0/38.80	0/37.21	
POLY-3 PERCENT (g)	0%	2.7%	0%	0%	
TERMINAL (d)	0/15 (0%)	1/15 (7%)	0/21 (0%)	0/16 (0%)	
FIRST INCIDENCE		730 (T)			
STATISTICAL TESTS					
POLY 3	(n)	(n)	(n)	(n)	
POLY 1.5	(n)	(n)	(n)	(n)	
POLY 6	(n)	(n)	(n)	(n)	
RAO-SCOTT	(n)	(n)	(n)	(n)	
LITTER C-A/FISHERS	(n)	(n)	(n)	(n)	

Test Type: CHRONIC Route: GAVAGE

Species/Strain: RATS/HSD

P08: STATISTICAL ANALYSIS OF PRIMARY TUMORS

Black Cohosh

CAS Number: 84776-26-1

Date Report Requested: 09/06/2021 Time Report Requested: 15:59:32 First Dose M/F: 07/03/12 / 07/02/12

Lab: BAT

			Males		
DOSE	0 mg/kg male	75 mg/kg male	250 mg/kg male	750 mg/kg male	
Mammary Gland Carcinoma or Adenoma					
TUMOR RATES	#	#	#	#	
OVERALL (a)	0/50 (0%)	1/50 (2%)	0/50 (0%)	0/50 (0%)	
LITTERS (b)	0/25 (0%)	1/25 (4%)	0/25 (0%)	0/25 (0%)	
POLY-3 RATE (c)	0/38.56	1/37.00	0/38.80	0/37.21	
POLY-3 PERCENT (g)	0%	2.7%	0%	0%	
TERMINAL (d)	0/15 (0%)	1/15 (7%)	0/21 (0%)	0/16 (0%)	
FIRST INCIDENCE		730 (T)			
STATISTICAL TESTS					
POLY 3	(n)	(n)	(n)	(n)	
POLY 1.5	(n)	(n)	(n)	(n)	
POLY 6	(n)	(n)	(n)	(n)	
RAO-SCOTT	(n)	(n)	(n)	(n)	
LITTER C-A/FISHERS	(n)	(n)	(n)	(n)	

Test Type: CHRONIC Route: GAVAGE

Species/Strain: RATS/HSD

P08: STATISTICAL ANALYSIS OF PRIMARY TUMORS

Black Cohosh

CAS Number: 84776-26-1

Date Report Requested: 09/06/2021 Time Report Requested: 15:59:32 First Dose M/F: 07/03/12 / 07/02/12

Lab: BAT

			Males	
DOSE	0 mg/kg male	75 mg/kg male	250 mg/kg male	750 mg/kg male
Mammary Gland Fibroadenoma				
TUMOR RATES	#	#	#	#
OVERALL (a)	3/50 (6%)	1/50 (2%)	2/50 (4%)	1/50 (2%)
LITTERS (b)	3/25 (12%)	1/25 (4%)	2/25 (8%)	1/25 (4%)
POLY-3 RATE (c)	3/38.84	1/37.21	2/38.80	1/37.21
POLY-3 PERCENT (g)	7.7%	2.7%	5.2%	2.7%
TERMINAL (d)	2/15 (13%)	0/15 (0%)	2/21 (10%)	1/16 (6%)
FIRST INCIDENCE	654	676	730 (T)	730 (T)
STATISTICAL TESTS				
POLY 3	P=0.348N	P=0.320N	P=0.500N	P=0.319N
POLY 1.5	P=0.345N	P=0.313N	P=0.500N	P=0.311N
POLY 6	P=0.353N	P=0.326N	P=0.493N	P=0.329N
RAO-SCOTT	P=0.349N	P=0.314N	P=0.485N	P=0.314N
LITTER C-A/FISHERS	P=0.341N	P=0.305N	P=0.500N	P=0.305N

Test Type: CHRONIC Route: GAVAGE

Species/Strain: RATS/HSD

P08: STATISTICAL ANALYSIS OF PRIMARY TUMORS

Black Cohosh

CAS Number: 84776-26-1

Date Report Requested: 09/06/2021 Time Report Requested: 15:59:32 First Dose M/F: 07/03/12 / 07/02/12

Lab: BAT

			Males		
DOSE	0 mg/kg male	75 mg/kg male	250 mg/kg male	750 mg/kg male	
Mammary Gland Fibroma, Fibroadenoma or	Adenoma				
TUMOR RATES	#	#	#	#	
OVERALL (a)	3/50 (6%)	1/50 (2%)	2/50 (4%)	1/50 (2%)	
LITTERS (b)	3/25 (12%)	1/25 (4%)	2/25 (8%)	1/25 (4%)	
POLY-3 RATE (c)	3/38.84	1/37.21	2/38.80	1/37.21	
POLY-3 PERCENT (g)	7.7%	2.7%	5.2%	2.7%	
TERMINAL (d)	2/15 (13%)	0/15 (0%)	2/21 (10%)	1/16 (6%)	
FIRST INCIDENCE	654	676	730 (T)	730 (T)	
STATISTICAL TESTS					
POLY 3	P=0.348N	P=0.320N	P=0.500N	P=0.319N	
POLY 1.5	P=0.345N	P=0.313N	P=0.500N	P=0.311N	
POLY 6	P=0.353N	P=0.326N	P=0.493N	P=0.329N	
RAO-SCOTT	P=0.349N	P=0.314N	P=0.485N	P=0.314N	
LITTER C-A/FISHERS	P=0.341N	P=0.305N	P=0.500N	P=0.305N	

Test Type: CHRONIC Route: GAVAGE

Species/Strain: RATS/HSD

P08: STATISTICAL ANALYSIS OF PRIMARY TUMORS

Black Cohosh
CAS Number: 84776-26-1

Date Report Requested: 09/06/2021 Time Report Requested: 15:59:32 First Dose M/F: 07/03/12 / 07/02/12

Lab: BAT

			Males		
DOSE	0 mg/kg male	75 mg/kg male	250 mg/kg male	750 mg/kg male	
Mammary Gland Fibroma, Fibroadenoma, Ca	arcinoma, or Adenoma				
TUMOR RATES	#	#	#	#	
OVERALL (a)	3/50 (6%)	2/50 (4%)	2/50 (4%)	1/50 (2%)	
LITTERS (b)	3/25 (12%)	2/25 (8%)	2/25 (8%)	1/25 (4%)	
POLY-3 RATE (c)	3/38.84	2/37.21	2/38.80	1/37.21	
POLY-3 PERCENT (g)	7.7%	5.4%	5.2%	2.7%	
TERMINAL (d)	2/15 (13%)	1/15 (7%)	2/21 (10%)	1/16 (6%)	
FIRST INCIDENCE	654	676	730 (T)	730 (T)	
STATISTICAL TESTS					
POLY 3	P=0.275N	P=0.520N	P=0.500N	P=0.319N	
POLY 1.5	P=0.271N	P=0.510N	P=0.500N	P=0.311N	
POLY 6	P=0.281N	P=0.530N	P=0.493N	P=0.329N	
RAO-SCOTT	P=0.268N	P=0.490N	P=0.475N	P=0.299N	
LITTER C-A/FISHERS	P=0.264N	P=0.500N	P=0.500N	P=0.305N	

Test Type: CHRONIC Route: GAVAGE

Species/Strain: RATS/HSD

P08: STATISTICAL ANALYSIS OF PRIMARY TUMORS

Black Cohosh
CAS Number: 84776-26-1

Date Report Requested: 09/06/2021 Time Report Requested: 15:59:32 First Dose M/F: 07/03/12 / 07/02/12

Lab: BAT

			Males		
DOSE	0 mg/kg male	75 mg/kg male	250 mg/kg male	750 mg/kg male	
Pancreas Adenoma					
TUMOR RATES					
OVERALL (a)	6/50 (12%)	5/50 (10%)	6/50 (12%)	4/50 (8%)	
LITTERS (b)	6/25 (24%)	5/25 (20%)	5/25 (20%)	3/25 (12%)	
POLY-3 RATE (c)	6/39.60	5/37.40	6/39.20	4/37.23	
POLY-3 PERCENT (g)	15.2%	13.4%	15.3%	10.7%	
TERMINAL (d)	2/15 (13%)	3/15 (20%)	5/21 (24%)	3/16 (19%)	
FIRST INCIDENCE	618	676	618	725	
STATISTICAL TESTS					
POLY 3	P=0.366N	P=0.541N	P=0.616	P=0.407N	
POLY 1.5	P=0.351N	P=0.521N	P=0.619	P=0.386N	
POLY 6	P=0.389N	P=0.566N	P=0.622	P=0.437N	
RAO-SCOTT	P=0.365N	P=0.525N	P=0.598	P=0.400N	
LITTER C-A/FISHERS	P=0.196N	P=0.500N	P=0.500N	P=0.232N	

Test Type: CHRONIC Route: GAVAGE

Species/Strain: RATS/HSD

P08: STATISTICAL ANALYSIS OF PRIMARY TUMORS

Black Cohosh

CAS Number: 84776-26-1

Date Report Requested: 09/06/2021 Time Report Requested: 15:59:32 First Dose M/F: 07/03/12 / 07/02/12

Lab: BAT

Males					
DOSE	0 mg/kg male	75 mg/kg male	250 mg/kg male	750 mg/kg male	
Pancreas Carcinoma or Adenoma					
TUMOR RATES					
OVERALL (a)	7/50 (14%)	5/50 (10%)	6/50 (12%)	4/50 (8%)	
LITTERS (b)	7/25 (28%)	5/25 (20%)	5/25 (20%)	3/25 (12%)	
POLY-3 RATE (c)	7/39.68	5/37.40	6/39.20	4/37.23	
POLY-3 PERCENT (g)	17.6%	13.4%	15.3%	10.7%	
TERMINAL (d)	2/15 (13%)	3/15 (20%)	5/21 (24%)	3/16 (19%)	
FIRST INCIDENCE	618	676	618	725	
STATISTICAL TESTS					
POLY 3	P=0.291N	P=0.419N	P=0.510N	P=0.294N	
POLY 1.5	P=0.279N	P=0.399N	P=0.504N	P=0.276N	
POLY 6	P=0.311N	P=0.445N	P=0.507N	P=0.323N	
RAO-SCOTT	P=0.296N	P=0.410N	P=0.497N	P=0.294N	
LITTER C-A/FISHERS	P=0.142N	P=0.371N	P=0.371N	P=0.145N	

Test Type: CHRONIC Route: GAVAGE

Species/Strain: RATS/HSD

P08: STATISTICAL ANALYSIS OF PRIMARY TUMORS

Black Cohosh

CAS Number: 84776-26-1

Date Report Requested: 09/06/2021 Time Report Requested: 15:59:32 First Dose M/F: 07/03/12 / 07/02/12

Lab: BAT

	Males					
DOSE	0 mg/kg male	75 mg/kg male	250 mg/kg male	750 mg/kg male		
Pituitary Gland: Pars Distal Adenoma	is or Unspecified Site					
TUMOR RATES						
OVERALL (a)	12/50 (24%)	7/50 (14%)	12/50 (24%)	6/50 (12%)		
LITTERS (b)	9/25 (36%)	5/25 (20%)	10/25 (40%)	6/25 (24%)		
POLY-3 RATE (c)	12/40.22	7/38.21	12/40.79	6/38.81		
POLY-3 PERCENT (g)	29.8%	18.3%	29.4%	15.5%		
TERMINAL (d)	6/15 (40%)	1/15 (7%)	5/21 (24%)	2/16 (13%)		
FIRST INCIDENCE	481	553	402	434		
STATISTICAL TESTS						
POLY 3	P=0.144N	P=0.173N	P=0.581N	P=0.100N		
POLY 1.5	P=0.143N	P=0.163N	P=0.584N	P=0.095N		
POLY 6	P=0.147N	P=0.182N	P=0.561N	P=0.104N		
RAO-SCOTT	P=0.178N	P=0.203N	P=0.573N	P=0.131N		
LITTER C-A/FISHERS	P=0.372N	P=0.173N	P=0.500	P=0.269N		

Test Type: CHRONIC Route: GAVAGE

LITTER C-A/FISHERS

P=0.459

P=0.174

Species/Strain: RATS/HSD

P08: STATISTICAL ANALYSIS OF PRIMARY TUMORS

Black Cohosh CAS Number: 84776-26-1

Date Report Requested: 09/06/2021 **Time Report Requested:** 15:59:32 **First Dose M/F:** 07/03/12 / 07/02/12

Lab: BAT

STATISTICAL ANALYSIS OF PRIMARY TUMORS IN RATS(HSD) TERMINAL SACRIFICE AT 105 WEEKS

Males					
DOSE	0 mg/kg male	75 mg/kg male	250 mg/kg male	750 mg/kg male	
Skin	Carainama Bassas Tr	umay (May B) Baasi Call	Adapama Adapama Par	sillama Su Danillama Kaustaasanthama Tulahaasithaliama	
TUMOR RATES	#	#	#	pilloma, Sq Papilloma, Keratoacanthoma, Trichoepithelioma #	
OVERALL (a)	1/50 (2%)	4/50 (8%)	3/50 (6%)	3/50 (6%)	
LITTERS (b)	1/25 (4%)	4/25 (16%)	3/25 (12%)	3/25 (12%)	
POLY-3 RATE (c)	1/38.56	4/37.79	3/39.33	3/37.91	
POLY-3 PERCENT (g)	2.6%	10.6%	7.6%	7.9%	
TERMINAL (d)	1/15 (7%)	1/15 (7%)	1/21 (5%)	1/16 (6%)	
FIRST INCIDENCE	730 (T)	618	621	598	
STATISTICAL TESTS					
POLY 3	P=0.451	P=0.170	P=0.311	P=0.298	
POLY 1.5	P=0.458	P=0.174	P=0.309	P=0.303	
POLY 6	P=0.448	P=0.168	P=0.324	P=0.295	
	P=0.439	P=0.164	P=0.293	P=0.278	

P=0.305

P=0.305

Test Type: CHRONIC Route: GAVAGE

Species/Strain: RATS/HSD

P08: STATISTICAL ANALYSIS OF PRIMARY TUMORS

Black Cohosh

CAS Number: 84776-26-1

Date Report Requested: 09/06/2021 Time Report Requested: 15:59:32 First Dose M/F: 07/03/12 / 07/02/12

Lab: BAT

			Males		
DOSE	0 mg/kg male	75 mg/kg male	250 mg/kg male	750 mg/kg male	
Skin Fibroma					
TUMOR RATES	#	#	#	#	
OVERALL (a)	4/50 (8%)	1/50 (2%)	4/50 (8%)	5/50 (10%)	
LITTERS (b)	4/25 (16%)	1/25 (4%)	4/25 (16%)	5/25 (20%)	
POLY-3 RATE (c)	4/39.17	1/37.21	4/39.26	5/37.56	
POLY-3 PERCENT (g)	10.2%	2.7%	10.2%	13.3%	
TERMINAL (d)	2/15 (13%)	0/15 (0%)	2/21 (10%)	4/16 (25%)	
FIRST INCIDENCE	577	676	604	632	
STATISTICAL TESTS					
POLY 3	P=0.211	P=0.192N	P=0.644N	P=0.473	
POLY 1.5	P=0.217	P=0.186N	P=0.643N	P=0.488	
POLY 6	P=0.204	P=0.199N	P=0.634N	P=0.457	
RAO-SCOTT	P=0.202	P=0.180N	P=0.618N	P=0.450	
LITTER C-A/FISHERS	P=0.212	P=0.174N	P=0.649	P=0.500	

Test Type: CHRONIC Route: GAVAGE

Species/Strain: RATS/HSD

P08: STATISTICAL ANALYSIS OF PRIMARY TUMORS

Black Cohosh CAS Number: 84776-26-1

Date Report Requested: 09/06/2021 Time Report Requested: 15:59:32 First Dose M/F: 07/03/12 / 07/02/12

Lab: BAT

	Males				
DOSE	0 mg/kg male	75 mg/kg male	250 mg/kg male	750 mg/kg male	
ikin					
Fibroma, Fibrosarcoma, Sa	rcoma, Myxoma, Myxosa	rcoma, Malignant Fibrous	s Histiocytoma, or Hemar	ngiopericytoma	
TUMOR RATES	#	#	#	#	
OVERALL (a)	6/50 (12%)	3/50 (6%)	4/50 (8%)	6/50 (12%)	
LITTERS (b)	6/25 (24%)	3/25 (12%)	4/25 (16%)	6/25 (24%)	
POLY-3 RATE (c)	6/40.47	3/38.55	4/39.26	6/38.34	
POLY-3 PERCENT (g)	14.8%	7.8%	10.2%	15.7%	
TERMINAL (d)	2/15 (13%)	0/15 (0%)	2/21 (10%)	4/16 (25%)	
FIRST INCIDENCE	155	274	604	441	
STATISTICAL TESTS					
POLY 3	P=0.360	P=0.263N	P=0.387N	P=0.584	
POLY 1.5	P=0.370	P=0.255N	P=0.383N	P=0.600	
POLY 6	P=0.348	P=0.273N	P=0.380N	P=0.565	
RAO-SCOTT	P=0.339	P=0.245N	P=0.365N	P=0.559	
LITTER C-A/FISHERS	P=0.374	P=0.232N	P=0.363N	P=0.629	

Test Type: CHRONIC Route: GAVAGE

Species/Strain: RATS/HSD

P08: STATISTICAL ANALYSIS OF PRIMARY TUMORS

Black Cohosh

CAS Number: 84776-26-1

Date Report Requested: 09/06/2021 Time Report Requested: 15:59:32 First Dose M/F: 07/03/12 / 07/02/12

Lab: BAT

			Males		
DOSE	0 mg/kg male	75 mg/kg male	250 mg/kg male	750 mg/kg male	
Skin					
Fibroma, Fibrosarcoma, Sa	rcoma, Myxoma, Myxosa	rcoma, or Malignant Fibro	ous Histiocytoma		
TUMOR RATES	#	#	#	#	
OVERALL (a)	6/50 (12%)	3/50 (6%)	4/50 (8%)	6/50 (12%)	
LITTERS (b)	6/25 (24%)	3/25 (12%)	4/25 (16%)	6/25 (24%)	
POLY-3 RATE (c)	6/40.47	3/38.55	4/39.26	6/38.34	
POLY-3 PERCENT (g)	14.8%	7.8%	10.2%	15.7%	
TERMINAL (d)	2/15 (13%)	0/15 (0%)	2/21 (10%)	4/16 (25%)	
FIRST INCIDENCE	155	274	604	441	
STATISTICAL TESTS					
POLY 3	P=0.360	P=0.263N	P=0.387N	P=0.584	
POLY 1.5	P=0.370	P=0.255N	P=0.383N	P=0.600	
POLY 6	P=0.348	P=0.273N	P=0.380N	P=0.565	
RAO-SCOTT	P=0.339	P=0.245N	P=0.365N	P=0.559	
LITTER C-A/FISHERS	P=0.374	P=0.232N	P=0.363N	P=0.629	

Test Type: CHRONIC Route: GAVAGE

Species/Strain: RATS/HSD

P08: STATISTICAL ANALYSIS OF PRIMARY TUMORS

Black Cohosh

CAS Number: 84776-26-1

Date Report Requested: 09/06/2021 Time Report Requested: 15:59:32 First Dose M/F: 07/03/12 / 07/02/12

Lab: BAT

	Males					
DOSE	0 mg/kg male	75 mg/kg male	250 mg/kg male	750 mg/kg male		
Skin Fibrosarcoma, Sarcoma, My	yxosarcoma, or Malignan	t Fibrous Histiocytoma				
TUMOR RATES	#	#	#	#		
OVERALL (a)	2/50 (4%)	2/50 (4%)	0/50 (0%)	1/50 (2%)		
LITTERS (b)	2/25 (8%)	2/25 (8%)	0/25 (0%)	1/25 (4%)		
POLY-3 RATE (c)	2/39.86	2/38.34	0/38.80	1/37.99		
POLY-3 PERCENT (g)	5%	5.2%	0%	2.6%		
TERMINAL (d)	0/15 (0%)	0/15 (0%)	0/21 (0%)	0/16 (0%)		
FIRST INCIDENCE	155	274		441		
STATISTICAL TESTS						
POLY 3	P=0.388N	P=0.681	P=0.243N	P=0.517N		
POLY 1.5	P=0.386N	P=0.686	P=0.242N	P=0.510N		
POLY 6	P=0.392N	P=0.676	P=0.239N	P=0.525N		
RAO-SCOTT	P=0.403N	P=0.663	P=0.274N	P=0.517N		
LITTER C-A/FISHERS	P=0.381N	P=0.695	P=0.245N	P=0.500N		

Test Type: CHRONIC Route: GAVAGE

Species/Strain: RATS/HSD

P08: STATISTICAL ANALYSIS OF PRIMARY TUMORS

Black Cohosh
CAS Number: 84776-26-1

Date Report Requested: 09/06/2021 Time Report Requested: 15:59:32 First Dose M/F: 07/03/12 / 07/02/12

Lab: BAT

Males					
DOSE	0 mg/kg male	75 mg/kg male	250 mg/kg male	750 mg/kg male	
Skin Keratoacanthoma					
TUMOR RATES	#	#	#	#	
OVERALL (a)	1/50 (2%)	4/50 (8%)	2/50 (4%)	3/50 (6%)	
LITTERS (b)	1/25 (4%)	4/25 (16%)	2/25 (8%)	3/25 (12%)	
POLY-3 RATE (c)	1/38.56	4/37.79	2/39.19	3/37.91	
POLY-3 PERCENT (g)	2.6%	10.6%	5.1%	7.9%	
TERMINAL (d)	1/15 (7%)	1/15 (7%)	1/21 (5%)	1/16 (6%)	
FIRST INCIDENCE	730 (T)	618	621	598	
STATISTICAL TESTS					
POLY 3	P=0.442	P=0.170	P=0.506	P=0.298	
POLY 1.5	P=0.447	P=0.174	P=0.503	P=0.303	
POLY 6	P=0.438	P=0.168	P=0.517	P=0.295	
RAO-SCOTT	P=0.434	P=0.173	P=0.481	P=0.289	
LITTER C-A/FISHERS	P=0.449	P=0.174	P=0.500	P=0.305	

Test Type: CHRONIC Route: GAVAGE

Species/Strain: RATS/HSD

P08: STATISTICAL ANALYSIS OF PRIMARY TUMORS

Black Cohosh
CAS Number: 84776-26-1

Date Report Requested: 09/06/2021 Time Report Requested: 15:59:32 First Dose M/F: 07/03/12 / 07/02/12

Lab: BAT

Males					
DOSE	0 mg/kg male	75 mg/kg male	250 mg/kg male	750 mg/kg male	
Skin Lipoma					
TUMOR RATES	#	#	#	#	
OVERALL (a)	2/50 (4%)	1/50 (2%)	0/50 (0%)	0/50 (0%)	
LITTERS (b)	2/25 (8%)	1/25 (4%)	0/25 (0%)	0/25 (0%)	
POLY-3 RATE (c)	2/38.56	1/37.00	0/38.80	0/37.21	
POLY-3 PERCENT (g)	5.2%	2.7%	0%	0%	
TERMINAL (d)	2/15 (13%)	1/15 (7%)	0/21 (0%)	0/16 (0%)	
FIRST INCIDENCE	730 (T)	730 (T)			
STATISTICAL TESTS					
POLY 3	P=0.168N	P=0.514N	P=0.235N	P=0.244N	
POLY 1.5	P=0.168N	P=0.507N	P=0.236N	P=0.240N	
POLY 6	P=0.168N	P=0.522N	P=0.229N	P=0.248N	
RAO-SCOTT	P=0.227N	P=0.533N	P=0.303N	P=0.306N	
LITTER C-A/FISHERS	P=0.167N	P=0.500N	P=0.245N	P=0.245N	

Test Type: CHRONIC Route: GAVAGE

Species/Strain: RATS/HSD

P08: STATISTICAL ANALYSIS OF PRIMARY TUMORS

Black Cohosh
CAS Number: 84776-26-1

Date Report Requested: 09/06/2021 Time Report Requested: 15:59:32 First Dose M/F: 07/03/12 / 07/02/12

Lab: BAT

	Males					
DOSE	0 mg/kg male	75 mg/kg male	250 mg/kg male	750 mg/kg male		
Skin						
Squamous Cell Papilloma, I	Papilloma, Squamous Ce	II Carcinoma or Keratoac	anthoma			
TUMOR RATES	#	#	#	#		
OVERALL (a)	1/50 (2%)	4/50 (8%)	3/50 (6%)	3/50 (6%)		
LITTERS (b)	1/25 (4%)	4/25 (16%)	3/25 (12%)	3/25 (12%)		
POLY-3 RATE (c)	1/38.56	4/37.79	3/39.33	3/37.91		
POLY-3 PERCENT (g)	2.6%	10.6%	7.6%	7.9%		
TERMINAL (d)	1/15 (7%)	1/15 (7%)	1/21 (5%)	1/16 (6%)		
FIRST INCIDENCE	730 (T)	618	621	598		
STATISTICAL TESTS						
POLY 3	P=0.451	P=0.170	P=0.311	P=0.298		
POLY 1.5	P=0.458	P=0.174	P=0.309	P=0.303		
POLY 6	P=0.448	P=0.168	P=0.324	P=0.295		
RAO-SCOTT	P=0.439	P=0.164	P=0.293	P=0.278		
LITTER C-A/FISHERS	P=0.459	P=0.174	P=0.305	P=0.305		

Test Type: CHRONIC Route: GAVAGE

Species/Strain: RATS/HSD

P08: STATISTICAL ANALYSIS OF PRIMARY TUMORS

Black Cohosh
CAS Number: 84776-26-1

Date Report Requested: 09/06/2021 Time Report Requested: 15:59:32 First Dose M/F: 07/03/12 / 07/02/12

Lab: BAT

			84-1		
			Males		
DOSE	0 mg/kg male	75 mg/kg male	250 mg/kg male	750 mg/kg male	
Skin					
Squamous Cell Papilloma,	Papilloma, or Keratoacan	thoma			
TUMOR RATES	#	#	#	#	
OVERALL (a)	1/50 (2%)	4/50 (8%)	3/50 (6%)	3/50 (6%)	
LITTERS (b)	1/25 (4%)	4/25 (16%)	3/25 (12%)	3/25 (12%)	
POLY-3 RATE (c)	1/38.56	4/37.79	3/39.33	3/37.91	
POLY-3 PERCENT (g)	2.6%	10.6%	7.6%	7.9%	
TERMINAL (d)	1/15 (7%)	1/15 (7%)	1/21 (5%)	1/16 (6%)	
FIRST INCIDENCE	730 (T)	618	621	598	
STATISTICAL TESTS					
POLY 3	P=0.451	P=0.170	P=0.311	P=0.298	
POLY 1.5	P=0.458	P=0.174	P=0.309	P=0.303	
POLY 6	P=0.448	P=0.168	P=0.324	P=0.295	
RAO-SCOTT	P=0.439	P=0.164	P=0.293	P=0.278	
LITTER C-A/FISHERS	P=0.459	P=0.174	P=0.305	P=0.305	

Test Type: CHRONIC Route: GAVAGE

Species/Strain: RATS/HSD

P08: STATISTICAL ANALYSIS OF PRIMARY TUMORS

Black Cohosh
CAS Number: 84776-26-1

Date Report Requested: 09/06/2021 Time Report Requested: 15:59:32 First Dose M/F: 07/03/12 / 07/02/12

Lab: BAT

Males					
DOSE	0 mg/kg male	75 mg/kg male	250 mg/kg male	750 mg/kg male	
Thyroid Gland: C-Cell Adenoma					
TUMOR RATES					
OVERALL (a)	11/50 (22%)	6/50 (12%)	9/50 (18%)	7/50 (14%)	
LITTERS (b)	10/25 (40%)	6/25 (24%)	9/25 (36%)	7/25 (28%)	
POLY-3 RATE (c)	11/39.55	6/38.80	9/38.97	7/37.91	
POLY-3 PERCENT (g)	27.8%	15.5%	23.1%	18.5%	
TERMINAL (d)	6/15 (40%)	1/15 (7%)	7/21 (33%)	3/16 (19%)	
FIRST INCIDENCE	646	560	694	633	
STATISTICAL TESTS					
POLY 3	P=0.355N	P=0.142N	P=0.411N	P=0.237N	
POLY 1.5	P=0.340N	P=0.142N	P=0.405N	P=0.224N	
POLY 6	P=0.375N	P=0.138N	P=0.406N	P=0.251N	
RAO-SCOTT	P=0.349N	P=0.140N	P=0.396N	P=0.229N	
LITTER C-A/FISHERS	P=0.385N	P=0.182N	P=0.500N	P=0.276N	

Test Type: CHRONIC Route: GAVAGE

Species/Strain: RATS/HSD

P08: STATISTICAL ANALYSIS OF PRIMARY TUMORS

Black Cohosh
CAS Number: 84776-26-1

Date Report Requested: 09/06/2021 Time Report Requested: 15:59:32 First Dose M/F: 07/03/12 / 07/02/12

Lab: BAT

	Males					
DOSE	0 mg/kg male	75 mg/kg male	250 mg/kg male	750 mg/kg male		
Thyroid Gland: C-Cell Carcinoma						
TUMOR RATES						
OVERALL (a)	1/50 (2%)	0/50 (0%)	0/50 (0%)	1/50 (2%)		
LITTERS (b)	1/25 (4%)	0/25 (0%)	0/25 (0%)	1/25 (4%)		
POLY-3 RATE (c)	1/38.56	0/37.00	0/38.80	1/37.21		
POLY-3 PERCENT (g)	2.6%	0%	0%	2.7%		
TERMINAL (d)	1/15 (7%)	0/15 (0%)	0/21 (0%)	1/16 (6%)		
FIRST INCIDENCE	730 (T)			730 (T)		
STATISTICAL TESTS						
POLY 3	(n)	(n)	(n)	(n)		
POLY 1.5	(n)	(n)	(n)	(n)		
POLY 6	(n)	(n)	(n)	(n)		
RAO-SCOTT	(n)	(n)	(n)	(n)		
LITTER C-A/FISHERS	(n)	(n)	(n)	(n)		

Test Type: CHRONIC Route: GAVAGE

Species/Strain: RATS/HSD

P08: STATISTICAL ANALYSIS OF PRIMARY TUMORS

Black Cohosh
CAS Number: 84776-26-1

Date Report Requested: 09/06/2021 Time Report Requested: 15:59:32 First Dose M/F: 07/03/12 / 07/02/12

Lab: BAT

Males					
DOSE	0 mg/kg male	75 mg/kg male	250 mg/kg male	750 mg/kg male	
Thyroid Gland: C-Cell Carcinoma or Adenoma					
TUMOR RATES					
OVERALL (a)	11/50 (22%)	6/50 (12%)	9/50 (18%)	8/50 (16%)	
LITTERS (b)	10/25 (40%)	6/25 (24%)	9/25 (36%)	8/25 (32%)	
POLY-3 RATE (c)	11/39.55	6/38.80	9/38.97	8/37.91	
POLY-3 PERCENT (g)	27.8%	15.5%	23.1%	21.1%	
TERMINAL (d)	6/15 (40%)	1/15 (7%)	7/21 (33%)	4/16 (25%)	
FIRST INCIDENCE	646	560	694	633	
STATISTICAL TESTS					
POLY 3	P=0.483N	P=0.142N	P=0.411N	P=0.334N	
POLY 1.5	P=0.465N	P=0.142N	P=0.405N	P=0.317N	
POLY 6	P=0.508N	P=0.138N	P=0.406N	P=0.355N	
RAO-SCOTT	P=0.473N	P=0.139N	P=0.395N	P=0.320N	
LITTER C-A/FISHERS	P=0.524N	P=0.182N	P=0.500N	P=0.384N	

Test Type: CHRONIC Route: GAVAGE

Species/Strain: RATS/HSD

P08: STATISTICAL ANALYSIS OF PRIMARY TUMORS

Black Cohosh
CAS Number: 84776-26-1

Date Report Requested: 09/06/2021 Time Report Requested: 15:59:32 First Dose M/F: 07/03/12 / 07/02/12

Lab: BAT

Males					
DOSE	0 mg/kg male	75 mg/kg male	250 mg/kg male	750 mg/kg male	
Zymbal's Gland Carcinoma or Adenoma					
TUMOR RATES	#	#	#	#	
OVERALL (a)	2/50 (4%)	1/50 (2%)	1/50 (2%)	0/50 (0%)	
LITTERS (b)	2/25 (8%)	1/25 (4%)	1/25 (4%)	0/25 (0%)	
POLY-3 RATE (c)	2/39.17	1/37.00	1/39.59	0/37.21	
POLY-3 PERCENT (g)	5.1%	2.7%	2.5%	0%	
TERMINAL (d)	0/15 (0%)	0/15 (0%)	0/21 (0%)	0/16 (0%)	
FIRST INCIDENCE	618	729	435		
STATISTICAL TESTS					
POLY 3	P=0.197N	P=0.520N	P=0.496N	P=0.248N	
POLY 1.5	P=0.195N	P=0.510N	P=0.497N	P=0.242N	
POLY 6	P=0.199N	P=0.532N	P=0.490N	P=0.256N	
RAO-SCOTT	P=0.213N	P=0.505N	P=0.491N	P=0.258N	
LITTER C-A/FISHERS	P=0.191N	P=0.500N	P=0.500N	P=0.245N	

Test Type: CHRONIC Route: GAVAGE

Species/Strain: RATS/HSD

P08: STATISTICAL ANALYSIS OF PRIMARY TUMORS

Black Cohosh

CAS Number: 84776-26-1

Date Report Requested: 09/06/2021 Time Report Requested: 15:59:32 First Dose M/F: 07/03/12 / 07/02/12

Lab: BAT

			Males		
DOSE	0 mg/kg male	75 mg/kg male	250 mg/kg male	750 mg/kg male	
All Organs Hemangiosarcoma					
TUMOR RATES	#	#	#	#	
OVERALL (a)	0/50 (0%)	0/50 (0%)	1/50 (2%)	1/50 (2%)	
LITTERS (b)	0/25 (0%)	0/25 (0%)	1/25 (4%)	1/25 (4%)	
POLY-3 RATE (c)	0/38.56	0/37.00	1/38.97	1/37.53	
POLY-3 PERCENT (g)	0%	0%	2.6%	2.7%	
TERMINAL (d)	0/15 (0%)	0/15 (0%)	0/21 (0%)	0/16 (0%)	
FIRST INCIDENCE			688	643	
STATISTICAL TESTS					
POLY 3	(n)	(n)	(n)	(n)	
POLY 1.5	(n)	(n)	(n)	(n)	
POLY 6	(n)	(n)	(n)	(n)	
RAO-SCOTT	(n)	(n)	(n)	(n)	
LITTER C-A/FISHERS	(n)	(n)	(n)	(n)	

Test Type: CHRONIC Route: GAVAGE

Species/Strain: RATS/HSD

P08: STATISTICAL ANALYSIS OF PRIMARY TUMORS

Black Cohosh

CAS Number: 84776-26-1

Date Report Requested: 09/06/2021 Time Report Requested: 15:59:32 First Dose M/F: 07/03/12 / 07/02/12

Lab: BAT

			Males		
DOSE	0 mg/kg male	75 mg/kg male	250 mg/kg male	750 mg/kg male	
All Organs Hemangiosarcoma or Hema	angioma				
TUMOR RATES	#	#	#	#	
OVERALL (a)	0/50 (0%)	1/50 (2%)	1/50 (2%)	1/50 (2%)	
LITTERS (b)	0/25 (0%)	1/25 (4%)	1/25 (4%)	1/25 (4%)	
POLY-3 RATE (c)	0/38.56	1/37.24	1/38.97	1/37.53	
POLY-3 PERCENT (g)	0%	2.7%	2.6%	2.7%	
TERMINAL (d)	0/15 (0%)	0/15 (0%)	0/21 (0%)	0/16 (0%)	
FIRST INCIDENCE		666	688	643	
STATISTICAL TESTS					
POLY 3	(n)	(n)	(n)	(n)	
POLY 1.5	(n)	(n)	(n)	(n)	
POLY 6	(n)	(n)	(n)	(n)	
RAO-SCOTT	(n)	(n)	(n)	(n)	
LITTER C-A/FISHERS	(n)	(n)	(n)	(n)	

Test Type: CHRONIC Route: GAVAGE

Species/Strain: RATS/HSD

P08: STATISTICAL ANALYSIS OF PRIMARY TUMORS

Black Cohosh

CAS Number: 84776-26-1

Date Report Requested: 09/06/2021 Time Report Requested: 15:59:32 First Dose M/F: 07/03/12 / 07/02/12

Lab: BAT

Males					
DOSE	0 mg/kg male	75 mg/kg male	250 mg/kg male	750 mg/kg male	
All Organs Leukemia: Lymphocytic, Mo	onocytic, Mononuclear, o	or Undifferentiated			
TUMOR RATES	#	#	#	#	
OVERALL (a)	0/50 (0%)	2/50 (4%)	0/50 (0%)	0/50 (0%)	
LITTERS (b)	0/25 (0%)	2/25 (8%)	0/25 (0%)	0/25 (0%)	
POLY-3 RATE (c)	0/38.56	2/37.91	0/38.80	0/37.21	
POLY-3 PERCENT (g)	0%	5.3%	0%	0%	
TERMINAL (d)	0/15 (0%)	0/15 (0%)	0/21 (0%)	0/16 (0%)	
FIRST INCIDENCE		575			
STATISTICAL TESTS					
POLY 3	P=0.376N	P=0.232	(e)	(e)	
POLY 1.5	P=0.372N	P=0.235	(e)	(e)	
POLY 6	P=0.378N	P=0.232	(e)	(e)	
RAO-SCOTT	P=0.451N	P=0.346	(e)	(e)	
LITTER C-A/FISHERS	P=0.368N	P=0.245	(e)	(e)	

Test Type: CHRONIC Route: GAVAGE

Species/Strain: RATS/HSD

P08: STATISTICAL ANALYSIS OF PRIMARY TUMORS

Black Cohosh

CAS Number: 84776-26-1

Date Report Requested: 09/06/2021 Time Report Requested: 15:59:32 First Dose M/F: 07/03/12 / 07/02/12

Lab: BAT

			Males	
DOSE	0 mg/kg male	75 mg/kg male	250 mg/kg male	750 mg/kg male
All Organs Malignant Schwannoma				
TUMOR RATES	#	#	#	#
OVERALL (a)	0/50 (0%)	0/50 (0%)	3/50 (6%)	0/50 (0%)
LITTERS (b)	0/25 (0%)	0/25 (0%)	3/25 (12%)	0/25 (0%)
POLY-3 RATE (c)	0/38.56	0/37.00	3/39.70	0/37.21
POLY-3 PERCENT (g)	0%	0%	7.6%	0%
TERMINAL (d)	0/15 (0%)	0/15 (0%)	0/21 (0%)	0/16 (0%)
FIRST INCIDENCE			589	
STATISTICAL TESTS				
POLY 3	P=0.660N	(e)	P=0.123	(e)
POLY 1.5	P=0.655N	(e)	P=0.121	(e)
POLY 6	P=0.667N	(e)	P=0.130	(e)
RAO-SCOTT	P=0.657N	(e)	P=0.223	(e)
LITTER C-A/FISHERS	P=0.651N	(e)	P=0.117	(e)

Test Type: CHRONIC Route: GAVAGE

Species/Strain: RATS/HSD

P08: STATISTICAL ANALYSIS OF PRIMARY TUMORS

Black Cohosh

CAS Number: 84776-26-1

Date Report Requested: 09/06/2021 Time Report Requested: 15:59:32 First Dose M/F: 07/03/12 / 07/02/12

Lab: BAT

			Males	
DOSE	0 mg/kg male	75 mg/kg male	250 mg/kg male	750 mg/kg male
All Organs Mesothelioma: Benign, Mal	ignant, NOS			
TUMOR RATES	#	#	#	#
OVERALL (a)	2/50 (4%)	0/50 (0%)	1/50 (2%)	0/50 (0%)
LITTERS (b)	2/25 (8%)	0/25 (0%)	1/25 (4%)	0/25 (0%)
POLY-3 RATE (c)	2/39.12	0/37.00	1/38.80	0/37.21
POLY-3 PERCENT (g)	5.1%	0%	2.6%	0%
TERMINAL (d)	0/15 (0%)	0/15 (0%)	1/21 (5%)	0/16 (0%)
FIRST INCIDENCE	562		730 (T)	,
STATISTICAL TESTS				
POLY 3	P=0.268N	P=0.249N	P=0.503N	P=0.248N
POLY 1.5	P=0.269N	P=0.243N	P=0.501N	P=0.242N
POLY 6	P=0.267N	P=0.256N	P=0.498N	P=0.254N
RAO-SCOTT	P=0.324N	P=0.309N	P=0.529N	P=0.309N
LITTER C-A/FISHERS	P=0.270N	P=0.245N	P=0.500N	P=0.245N

Test Type: CHRONIC Route: GAVAGE

Species/Strain: RATS/HSD

P08: STATISTICAL ANALYSIS OF PRIMARY TUMORS

Black Cohosh

CAS Number: 84776-26-1

Date Report Requested: 09/06/2021 Time Report Requested: 15:59:32 First Dose M/F: 07/03/12 / 07/02/12

Lab: BAT

			Males		
DOSE	0 mg/kg male	75 mg/kg male	250 mg/kg male	750 mg/kg male	
All Organs Mesothelioma: Malignant					
TUMOR RATES	#	#	#	#	
OVERALL (a)	2/50 (4%)	0/50 (0%)	1/50 (2%)	0/50 (0%)	
LITTERS (b)	2/25 (8%)	0/25 (0%)	1/25 (4%)	0/25 (0%)	
POLY-3 RATE (c)	2/39.12	0/37.00	1/38.80	0/37.21	
POLY-3 PERCENT (g)	5.1%	0%	2.6%	0%	
TERMINAL (d)	0/15 (0%)	0/15 (0%)	1/21 (5%)	0/16 (0%)	
FIRST INCIDENCE	562		730 (T)		
STATISTICAL TESTS					
POLY 3	P=0.268N	P=0.249N	P=0.503N	P=0.248N	
POLY 1.5	P=0.269N	P=0.243N	P=0.501N	P=0.242N	
POLY 6	P=0.267N	P=0.256N	P=0.498N	P=0.254N	
RAO-SCOTT	P=0.324N	P=0.309N	P=0.529N	P=0.309N	
LITTER C-A/FISHERS	P=0.270N	P=0.245N	P=0.500N	P=0.245N	

Test Type: CHRONIC Route: GAVAGE

Species/Strain: RATS/HSD

P08: STATISTICAL ANALYSIS OF PRIMARY TUMORS

Black Cohosh

CAS Number: 84776-26-1

Date Report Requested: 09/06/2021 Time Report Requested: 15:59:32 First Dose M/F: 07/03/12 / 07/02/12

Lab: BAT

			Males		
DOSE	0 mg/kg male	75 mg/kg male	250 mg/kg male	750 mg/kg male	
All Organs Benign Tumors					
TUMOR RATES	#	#	#	#	
OVERALL (a)	30/50 (60%)	30/50 (60%)	30/50 (60%)	30/50 (60%)	
LITTERS (b)	22/25 (88%)	22/25 (88%)	20/25 (80%)	22/25 (88%)	
POLY-3 RATE (c)	30/43.33	30/42.37	30/42.96	30/42.99	
POLY-3 PERCENT (g)	69.2%	70.8%	69.8%	69.8%	
TERMINAL (d)	13/15 (87%)	10/15 (67%)	17/21 (81%)	12/16 (75%)	
FIRST INCIDENCE	481	553	402	434	
STATISTICAL TESTS					
POLY 3	P=0.556N	P=0.533	P=0.575	P=0.577	
POLY 1.5	P=0.539N	P=0.557	P=0.588	P=0.591N	
POLY 6	P=0.559	P=0.531	P=0.577	P=0.571	
RAO-SCOTT	P=0.544N	P=0.517	P=0.556	P=0.558	
LITTER C-A/FISHERS	P=0.583	P=0.666	P=0.351N	P=0.666	

Test Type: CHRONIC Route: GAVAGE

Species/Strain: RATS/HSD

P08: STATISTICAL ANALYSIS OF PRIMARY TUMORS

Black Cohosh

CAS Number: 84776-26-1

Date Report Requested: 09/06/2021 Time Report Requested: 15:59:32 First Dose M/F: 07/03/12 / 07/02/12

Lab: BAT

			Males	
DOSE	0 mg/kg male	75 mg/kg male	250 mg/kg male	750 mg/kg male
All Organs Malignant Tumors				
TUMOR RATES	#	#	#	#
OVERALL (a)	10/50 (20%)	9/50 (18%)	9/50 (18%)	8/50 (16%)
LITTERS (b)	9/25 (36%)	8/25 (32%)	8/25 (32%)	8/25 (32%)
POLY-3 RATE (c)	10/41.29	9/39.72	9/42.16	8/40.04
POLY-3 PERCENT (g)	24.2%	22.7%	21.4%	20%
TERMINAL (d)	2/15 (13%)	2/15 (13%)	1/21 (5%)	1/16 (6%)
FIRST INCIDENCE	155	274	413	441
STATISTICAL TESTS				
POLY 3	P=0.389N	P=0.539N	P=0.479N	P=0.423N
POLY 1.5	P=0.384N	P=0.522N	P=0.491N	P=0.413N
POLY 6	P=0.392N	P=0.556N	P=0.450N	P=0.431N
RAO-SCOTT	P=0.384N	P=0.523N	P=0.468N	P=0.412N
LITTER C-A/FISHERS	P=0.495N	P=0.500N	P=0.500N	P=0.500N

Test Type: CHRONIC Route: GAVAGE

Species/Strain: RATS/HSD

P08: STATISTICAL ANALYSIS OF PRIMARY TUMORS

Black Cohosh

CAS Number: 84776-26-1

Date Report Requested: 09/06/2021 Time Report Requested: 15:59:32 First Dose M/F: 07/03/12 / 07/02/12

Lab: BAT

			Males	
DOSE	0 mg/kg male	75 mg/kg male	250 mg/kg male	750 mg/kg male
All Organs Malignant and Benign Tumors	S			
TUMOR RATES	#	#	#	#
OVERALL (a)	33/50 (66%)	34/50 (68%)	36/50 (72%)	35/50 (70%)
LITTERS (b)	22/25 (88%)	24/25 (96%)	23/25 (92%)	24/25 (96%)
POLY-3 RATE (c)	33/44.72	34/44.50	36/45.47	35/45.05
POLY-3 PERCENT (g)	73.8%	76.4%	79.2%	77.7%
TERMINAL (d)	13/15 (87%)	10/15 (67%)	18/21 (86%)	12/16 (75%)
FIRST INCIDENCE	155	274	402	434
STATISTICAL TESTS				
POLY 3	P=0.418	P=0.483	P=0.349	P=0.421
POLY 1.5	P=0.410	P=0.482	P=0.340	P=0.413
POLY 6	P=0.443	P=0.525	P=0.379	P=0.460
RAO-SCOTT	P=0.421	P=0.476	P=0.356	P=0.421
LITTER C-A/FISHERS	P=0.341	P=0.305	P=0.500	P=0.305

Test Type: CHRONIC Route: GAVAGE

Species/Strain: RATS/HSD

P08: STATISTICAL ANALYSIS OF PRIMARY TUMORS

Black Cohosh

CAS Number: 84776-26-1

Date Report Requested: 09/06/2021 Time Report Requested: 15:59:32 First Dose M/F: 07/03/12 / 07/02/12

Lab: BAT

			Females	
DOSE	0 mg/kg female	75 mg/kg female	250 mg/kg female	750 mg/kg female
Adrenal Cortex Adenoma				
TUMOR RATES				
OVERALL (a)	2/50 (4%)	1/50 (2%)	0/50 (0%)	0/48 (0%)
LITTERS (b)	2/25 (8%)	1/25 (4%)	0/25 (0%)	0/25 (0%)
POLY-3 RATE (c)	2/41.83	1/39.58	0/42.83	0/34.39
POLY-3 PERCENT (g)	4.8%	2.5%	0%	0%
TERMINAL (d)	2/28 (7%)	0/24 (0%)	0/29 (0%)	0/20 (0%)
FIRST INCIDENCE	729 (T)	615		
STATISTICAL TESTS				
POLY 3	P=0.179N	P=0.519N	P=0.232N	P=0.283N
POLY 1.5	P=0.177N	P=0.514N	P=0.234N	P=0.268N
POLY 6	P=0.179N	P=0.522N	P=0.229N	P=0.303N
RAO-SCOTT	P=0.239N	P=0.552N	P=0.320N	P=0.341N
LITTER C-A/FISHERS	P=0.167N	P=0.500N	P=0.245N	P=0.245N

Test Type: CHRONIC Route: GAVAGE

Species/Strain: RATS/HSD

P08: STATISTICAL ANALYSIS OF PRIMARY TUMORS

Black Cohosh
CAS Number: 84776-26-1

Date Report Requested: 09/06/2021 Time Report Requested: 15:59:32 First Dose M/F: 07/03/12 / 07/02/12

Lab: BAT

			Females	
DOSE	0 mg/kg female	75 mg/kg female	250 mg/kg female	750 mg/kg female
Adrenal Medulla Pheochromocytoma Benign				
TUMOR RATES				
OVERALL (a)	3/50 (6%)	4/50 (8%)	2/50 (4%)	1/48 (2%)
LITTERS (b)	3/25 (12%)	4/25 (16%)	2/25 (8%)	1/25 (4%)
POLY-3 RATE (c)	3/42.03	4/39.18	2/42.83	1/34.39
POLY-3 PERCENT (g)	7.1%	10.2%	4.7%	2.9%
TERMINAL (d)	2/28 (7%)	4/24 (17%)	2/29 (7%)	1/20 (5%)
FIRST INCIDENCE	677	729 (T)	729 (T)	729 (T)
STATISTICAL TESTS				
POLY 3	P=0.215N	P=0.461	P=0.491N	P=0.380N
POLY 1.5	P=0.199N	P=0.473	P=0.495N	P=0.356N
POLY 6	P=0.238N	P=0.449	P=0.488N	P=0.413N
RAO-SCOTT	P=0.212N	P=0.454	P=0.488N	P=0.365N
LITTER C-A/FISHERS	P=0.156N	P=0.500	P=0.500N	P=0.305N

Test Type: CHRONIC Route: GAVAGE

Species/Strain: RATS/HSD

P08: STATISTICAL ANALYSIS OF PRIMARY TUMORS

Black Cohosh

CAS Number: 84776-26-1

Date Report Requested: 09/06/2021 Time Report Requested: 15:59:32 First Dose M/F: 07/03/12 / 07/02/12

Lab: BAT

			Females	
DOSE	0 mg/kg female	75 mg/kg female	250 mg/kg female	750 mg/kg female
Adrenal Medulla Pheochromocytoma: Benig	n, Complex, Malignant, N	IOS		
TUMOR RATES				
OVERALL (a)	3/50 (6%)	4/50 (8%)	2/50 (4%)	1/48 (2%)
LITTERS (b)	3/25 (12%)	4/25 (16%)	2/25 (8%)	1/25 (4%)
POLY-3 RATE (c)	3/42.03	4/39.18	2/42.83	1/34.39
POLY-3 PERCENT (g)	7.1%	10.2%	4.7%	2.9%
TERMINAL (d)	2/28 (7%)	4/24 (17%)	2/29 (7%)	1/20 (5%)
FIRST INCIDENCE	677	729 (T)	729 (T)	729 (T)
STATISTICAL TESTS				
POLY 3	P=0.215N	P=0.461	P=0.491N	P=0.380N
POLY 1.5	P=0.199N	P=0.473	P=0.495N	P=0.356N
POLY 6	P=0.238N	P=0.449	P=0.488N	P=0.413N
RAO-SCOTT	P=0.212N	P=0.454	P=0.488N	P=0.365N
LITTER C-A/FISHERS	P=0.156N	P=0.500	P=0.500N	P=0.305N

Test Type: CHRONIC Route: GAVAGE

Species/Strain: RATS/HSD

P08: STATISTICAL ANALYSIS OF PRIMARY TUMORS

Black Cohosh

CAS Number: 84776-26-1

Date Report Requested: 09/06/2021 Time Report Requested: 15:59:32 First Dose M/F: 07/03/12 / 07/02/12

Lab: BAT

			Females	
DOSE	0 mg/kg female	75 mg/kg female	250 mg/kg female	750 mg/kg female
Brain Granular Cell Tumor Benign				
TUMOR RATES				
OVERALL (a)	0/50 (0%)	0/50 (0%)	0/50 (0%)	0/50 (0%)
LITTERS (b)	0/25 (0%)	0/25 (0%)	0/25 (0%)	0/25 (0%)
POLY-3 RATE (c)	0/41.83	0/39.18	0/42.83	0/35.85
POLY-3 PERCENT (g)	0%	0%	0%	0%
TERMINAL (d)	0/28 (0%)	0/24 (0%)	0/29 (0%)	0/20 (0%)
FIRST INCIDENCE				
STATISTICAL TESTS				
POLY 3	(n)	(n)	(n)	(n)
POLY 1.5	(n)	(n)	(n)	(n)
POLY 6	(n)	(n)	(n)	(n)
RAO-SCOTT	(n)	(n)	(n)	(n)
LITTER C-A/FISHERS	(n)	(n)	(n)	(n)

Test Type: CHRONIC Route: GAVAGE

Species/Strain: RATS/HSD

P08: STATISTICAL ANALYSIS OF PRIMARY TUMORS

Black Cohosh

CAS Number: 84776-26-1

Date Report Requested: 09/06/2021 **Time Report Requested:** 15:59:32 **First Dose M/F:** 07/03/12 / 07/02/12

Lab: BAT

			Females	
DOSE	0 mg/kg female	75 mg/kg female	250 mg/kg female	750 mg/kg female
Clitoral/Preputial Gland Squamous Cell Carcinoma				
TUMOR RATES				
OVERALL (a)	1/49 (2%)	0/48 (0%)	0/49 (0%)	2/49 (4%)
LITTERS (b)	1/25 (4%)	0/25 (0%)	0/25 (0%)	2/25 (8%)
POLY-3 RATE (c)	1/41.30	0/38.41	0/41.84	2/35.55
POLY-3 PERCENT (g)	2.4%	0%	0%	5.6%
TERMINAL (d)	0/28 (0%)	0/24 (0%)	0/29 (0%)	1/20 (5%)
FIRST INCIDENCE	719			661
STATISTICAL TESTS				
POLY 3	P=0.174	P=0.514N	P=0.497N	P=0.448
POLY 1.5	P=0.181	P=0.512N	P=0.499N	P=0.467
POLY 6	P=0.167	P=0.517N	P=0.497N	P=0.422
RAO-SCOTT	P=0.223	P=0.594N	P=0.594N	P=0.493
LITTER C-A/FISHERS	P=0.187	P=0.500N	P=0.500N	P=0.500

Test Type: CHRONIC Route: GAVAGE

Species/Strain: RATS/HSD

P08: STATISTICAL ANALYSIS OF PRIMARY TUMORS

Black Cohosh

CAS Number: 84776-26-1

Date Report Requested: 09/06/2021 Time Report Requested: 15:59:32 First Dose M/F: 07/03/12 / 07/02/12

Lab: BAT

			Females	
DOSE	0 mg/kg female	75 mg/kg female	250 mg/kg female	750 mg/kg female
Intestine Small: Jejunum Carcinoma				
TUMOR RATES	#	#	#	#
OVERALL (a)	0/50 (0%)	0/50 (0%)	0/50 (0%)	0/50 (0%)
LITTERS (b)	0/25 (0%)	0/25 (0%)	0/25 (0%)	0/25 (0%)
POLY-3 RATE (c)	0/41.83	0/39.18	0/42.83	0/35.85
POLY-3 PERCENT (g)	0%	0%	0%	0%
TERMINAL (d)	0/28 (0%)	0/24 (0%)	0/29 (0%)	0/20 (0%)
FIRST INCIDENCE				
STATISTICAL TESTS				
POLY 3	(n)	(n)	(n)	(n)
POLY 1.5	(n)	(n)	(n)	(n)
POLY 6	(n)	(n)	(n)	(n)
RAO-SCOTT	(n)	(n)	(n)	(n)
LITTER C-A/FISHERS	(n)	(n)	(n)	(n)

Test Type: CHRONIC Route: GAVAGE

Species/Strain: RATS/HSD

P08: STATISTICAL ANALYSIS OF PRIMARY TUMORS

Black Cohosh

CAS Number: 84776-26-1

Date Report Requested: 09/06/2021 Time Report Requested: 15:59:32 First Dose M/F: 07/03/12 / 07/02/12

Lab: BAT

			Females	
DOSE	0 mg/kg female	75 mg/kg female	250 mg/kg female	750 mg/kg female
Intestine Small: Site Unspec Carcinoma	cified			
TUMOR RATES	#	#	#	#
OVERALL (a)	0/50 (0%)	0/50 (0%)	0/50 (0%)	0/50 (0%)
LITTERS (b)	0/25 (0%)	0/25 (0%)	0/25 (0%)	0/25 (0%)
POLY-3 RATE (c)	0/41.83	0/39.18	0/42.83	0/35.85
POLY-3 PERCENT (g)	0%	0%	0%	0%
TERMINAL (d)	0/28 (0%)	0/24 (0%)	0/29 (0%)	0/20 (0%)
FIRST INCIDENCE				
STATISTICAL TESTS				
POLY 3	(n)	(n)	(n)	(n)
POLY 1.5	(n)	(n)	(n)	(n)
POLY 6	(n)	(n)	(n)	(n)
RAO-SCOTT	(n)	(n)	(n)	(n)
LITTER C-A/FISHERS	(n)	(n)	(n)	(n)

Test Type: CHRONIC Route: GAVAGE

Species/Strain: RATS/HSD

P08: STATISTICAL ANALYSIS OF PRIMARY TUMORS

Black Cohosh
CAS Number: 84776-26-1

Date Report Requested: 09/06/2021 Time Report Requested: 15:59:32 First Dose M/F: 07/03/12 / 07/02/12

Lab: BAT

			Females	
DOSE	0 mg/kg female	75 mg/kg female	250 mg/kg female	750 mg/kg female
Islets, Pancreatic Adenoma				
TUMOR RATES				
OVERALL (a)	1/50 (2%)	1/50 (2%)	2/50 (4%)	0/49 (0%)
LITTERS (b)	1/25 (4%)	1/25 (4%)	2/25 (8%)	0/25 (0%)
POLY-3 RATE (c)	1/41.83	1/39.18	2/42.83	0/35.52
POLY-3 PERCENT (g)	2.4%	2.6%	4.7%	0%
TERMINAL (d)	1/28 (4%)	1/24 (4%)	2/29 (7%)	0/20 (0%)
FIRST INCIDENCE	729 (T)	729 (T)	729 (T)	
STATISTICAL TESTS				
POLY 3	P=0.380N	P=0.746	P=0.508	P=0.532N
POLY 1.5	P=0.363N	P=0.750	P=0.504	P=0.522N
POLY 6	P=0.403N	P=0.743	P=0.513	P=0.547N
RAO-SCOTT	P=0.363N	P=0.725	P=0.514	P=0.508N
LITTER C-A/FISHERS	P=0.331N	P=0.755	P=0.500	P=0.500N

Test Type: CHRONIC Route: GAVAGE

Species/Strain: RATS/HSD

P08: STATISTICAL ANALYSIS OF PRIMARY TUMORS

Black Cohosh

CAS Number: 84776-26-1

Date Report Requested: 09/06/2021 Time Report Requested: 15:59:32 First Dose M/F: 07/03/12 / 07/02/12

Lab: BAT

			Females	
DOSE	0 mg/kg female	75 mg/kg female	250 mg/kg female	750 mg/kg female
Islets, Pancreatic Carcinoma or Adenoma				
TUMOR RATES				
OVERALL (a)	1/50 (2%)	1/50 (2%)	2/50 (4%)	0/49 (0%)
LITTERS (b)	1/25 (4%)	1/25 (4%)	2/25 (8%)	0/25 (0%)
POLY-3 RATE (c)	1/41.83	1/39.18	2/42.83	0/35.52
POLY-3 PERCENT (g)	2.4%	2.6%	4.7%	0%
TERMINAL (d)	1/28 (4%)	1/24 (4%)	2/29 (7%)	0/20 (0%)
FIRST INCIDENCE	729 (T)	729 (T)	729 (T)	
STATISTICAL TESTS				
POLY 3	P=0.380N	P=0.746	P=0.508	P=0.532N
POLY 1.5	P=0.363N	P=0.750	P=0.504	P=0.522N
POLY 6	P=0.403N	P=0.743	P=0.513	P=0.547N
RAO-SCOTT	P=0.363N	P=0.725	P=0.514	P=0.508N
LITTER C-A/FISHERS	P=0.331N	P=0.755	P=0.500	P=0.500N

Test Type: CHRONIC Route: GAVAGE

Species/Strain: RATS/HSD

P08: STATISTICAL ANALYSIS OF PRIMARY TUMORS

Black Cohosh

CAS Number: 84776-26-1

Date Report Requested: 09/06/2021 Time Report Requested: 15:59:32 First Dose M/F: 07/03/12 / 07/02/12

Lab: BAT

			Females	
DOSE	0 mg/kg female	75 mg/kg female	250 mg/kg female	750 mg/kg female
Kidney: Renal Tubule Amphophilic/Vacuolar Aden	noma			
TUMOR RATES				
OVERALL (a)	0/50 (0%)	1/50 (2%)	1/50 (2%)	1/49 (2%)
LITTERS (b)	0/25 (0%)	1/25 (4%)	1/25 (4%)	1/25 (4%)
POLY-3 RATE (c)	0/41.83	1/39.52	1/43.43	1/35.39
POLY-3 PERCENT (g)	0%	2.5%	2.3%	2.8%
TERMINAL (d)	0/28 (0%)	0/24 (0%)	0/29 (0%)	0/20 (0%)
FIRST INCIDENCE		634	538	578
STATISTICAL TESTS				
POLY 3	(n)	(n)	(n)	(n)
POLY 1.5	(n)	(n)	(n)	(n)
POLY 6	(n)	(n)	(n)	(n)
RAO-SCOTT	(n)	(n)	(n)	(n)
LITTER C-A/FISHERS	(n)	(n)	(n)	(n)

Test Type: CHRONIC Route: GAVAGE

Species/Strain: RATS/HSD

P08: STATISTICAL ANALYSIS OF PRIMARY TUMORS

Black Cohosh

CAS Number: 84776-26-1

Date Report Requested: 09/06/2021 Time Report Requested: 15:59:32 First Dose M/F: 07/03/12 / 07/02/12

Lab: BAT

			Females	
DOSE	0 mg/kg female	75 mg/kg female	250 mg/kg female	750 mg/kg female
Kidney: Renal Tubule Amphophilic/Vacuolar Carc	sinoma			
TUMOR RATES				
OVERALL (a)	0/50 (0%)	2/50 (4%)	1/50 (2%)	1/49 (2%)
LITTERS (b)	0/25 (0%)	1/25 (4%)	1/25 (4%)	1/25 (4%)
POLY-3 RATE (c)	0/41.83	2/39.59	1/43.43	1/35.39
POLY-3 PERCENT (g)	0%	5.1%	2.3%	2.8%
TERMINAL (d)	0/28 (0%)	0/24 (0%)	0/29 (0%)	0/20 (0%)
FIRST INCIDENCE		634	538	578
STATISTICAL TESTS				
POLY 3	P=0.555	P=0.225	P=0.507	P=0.467
POLY 1.5	P=0.577	P=0.228	P=0.504	P=0.478
POLY 6	P=0.526	P=0.223	P=0.511	P=0.452
RAO-SCOTT	P=0.597	P=0.377	P=0.662	P=0.592
LITTER C-A/FISHERS	P=0.485	P=0.500	P=0.500	P=0.500

Test Type: CHRONIC Route: GAVAGE

Species/Strain: RATS/HSD

P08: STATISTICAL ANALYSIS OF PRIMARY TUMORS

Black Cohosh

CAS Number: 84776-26-1

Date Report Requested: 09/06/2021 Time Report Requested: 15:59:32 First Dose M/F: 07/03/12 / 07/02/12

Lab: BAT

			Females	
DOSE	0 mg/kg female	75 mg/kg female	250 mg/kg female	750 mg/kg female
Liver Hepatocellular Adenoma				
TUMOR RATES				
OVERALL (a)	2/50 (4%)	2/50 (4%)	1/50 (2%)	1/48 (2%)
LITTERS (b)	2/25 (8%)	2/25 (8%)	1/25 (4%)	1/25 (4%)
POLY-3 RATE (c)	2/41.83	2/39.39	1/42.83	1/34.57
POLY-3 PERCENT (g)	4.8%	5.1%	2.3%	2.9%
TERMINAL (d)	2/28 (7%)	0/24 (0%)	1/29 (3%)	1/20 (5%)
FIRST INCIDENCE	729 (T)	691	729 (T)	729 (T)
STATISTICAL TESTS				
POLY 3	P=0.432N	P=0.673	P=0.492N	P=0.566N
POLY 1.5	P=0.419N	P=0.678	P=0.496N	P=0.546N
POLY 6	P=0.450N	P=0.669	P=0.487N	P=0.594N
RAO-SCOTT	P=0.422N	P=0.651	P=0.486N	P=0.537N
LITTER C-A/FISHERS	P=0.380N	P=0.695	P=0.500N	P=0.500N

Test Type: CHRONIC Route: GAVAGE

Species/Strain: RATS/HSD

P08: STATISTICAL ANALYSIS OF PRIMARY TUMORS

Black Cohosh

CAS Number: 84776-26-1

Date Report Requested: 09/06/2021 Time Report Requested: 15:59:32 First Dose M/F: 07/03/12 / 07/02/12

Lab: BAT

			Females	
DOSE	0 mg/kg female	75 mg/kg female	250 mg/kg female	750 mg/kg female
Mammary Gland Carcinoma				
TUMOR RATES	#	#	#	#
OVERALL (a)	3/50 (6%)	2/50 (4%)	1/50 (2%)	3/50 (6%)
LITTERS (b)	3/25 (12%)	2/25 (8%)	1/25 (4%)	2/25 (8%)
POLY-3 RATE (c)	3/42.61	2/39.45	1/42.83	3/36.88
POLY-3 PERCENT (g)	7%	5.1%	2.3%	8.1%
TERMINAL (d)	1/28 (4%)	0/24 (0%)	1/29 (3%)	0/20 (0%)
FIRST INCIDENCE	578	675	729 (T)	586
STATISTICAL TESTS				
POLY 3	P=0.465	P=0.535N	P=0.303N	P=0.594
POLY 1.5	P=0.482	P=0.524N	P=0.304N	P=0.620
POLY 6	P=0.442	P=0.546N	P=0.303N	P=0.559
RAO-SCOTT	P=0.462	P=0.552N	P=0.362N	P=0.595
LITTER C-A/FISHERS	P=0.500N	P=0.500N	P=0.305N	P=0.500N

Test Type: CHRONIC Route: GAVAGE

Species/Strain: RATS/HSD

P08: STATISTICAL ANALYSIS OF PRIMARY TUMORS

Black Cohosh

CAS Number: 84776-26-1

Date Report Requested: 09/06/2021 Time Report Requested: 15:59:32 First Dose M/F: 07/03/12 / 07/02/12

Lab: BAT

			Females	
DOSE	0 mg/kg female	75 mg/kg female	250 mg/kg female	750 mg/kg female
Mammary Gland Carcinoma or Adenoma				
TUMOR RATES	#	#	#	#
OVERALL (a)	4/50 (8%)	2/50 (4%)	2/50 (4%)	3/50 (6%)
LITTERS (b)	4/25 (16%)	2/25 (8%)	2/25 (8%)	2/25 (8%)
POLY-3 RATE (c)	4/42.70	2/39.45	2/42.83	3/36.88
POLY-3 PERCENT (g)	9.4%	5.1%	4.7%	8.1%
TERMINAL (d)	1/28 (4%)	0/24 (0%)	2/29 (7%)	0/20 (0%)
FIRST INCIDENCE	578	675	729 (T)	586
STATISTICAL TESTS				
POLY 3	P=0.578	P=0.374N	P=0.335N	P=0.580N
POLY 1.5	P=0.598	P=0.362N	P=0.336N	P=0.550N
POLY 6	P=0.551	P=0.385N	P=0.336N	P=0.619N
RAO-SCOTT	P=0.557	P=0.399N	P=0.371N	P=0.575N
LITTER C-A/FISHERS	P=0.372N	P=0.334N	P=0.334N	P=0.334N

Test Type: CHRONIC Route: GAVAGE

Species/Strain: RATS/HSD

P08: STATISTICAL ANALYSIS OF PRIMARY TUMORS

Black Cohosh

CAS Number: 84776-26-1

Date Report Requested: 09/06/2021 Time Report Requested: 15:59:32 First Dose M/F: 07/03/12 / 07/02/12

Lab: BAT

			Females	
DOSE	0 mg/kg female	75 mg/kg female	250 mg/kg female	750 mg/kg female
Mammary Gland Fibroadenoma				
TUMOR RATES	#	#	#	#
OVERALL (a)	29/50 (58%)	31/50 (62%)	22/50 (44%)	13/50 (26%)
LITTERS (b)	18/25 (72%)	23/25 (92%)	17/25 (68%)	12/25 (48%)
POLY-3 RATE (c)	29/48.20	31/45.79	22/45.99	13/38.33
POLY-3 PERCENT (g)	60.2%	67.7%	47.8%	33.9%
TERMINAL (d)	13/28 (46%)	16/24 (67%)	13/29 (45%)	6/20 (30%)
FIRST INCIDENCE	499	386	360	571
STATISTICAL TESTS				
POLY 3	P=0.002N**	P=0.289	P=0.156N	P=0.011N*
POLY 1.5	P<0.001N**	P=0.330	P=0.135N	P=0.004N**
POLY 6	P=0.006N**	P=0.250	P=0.197N	P=0.034N*
RAO-SCOTT	P=0.002N**	P=0.302	P=0.172N	P=0.016N*
LITTER C-A/FISHERS	P=0.004N**	P=0.069	P=0.500N	P=0.074N

Test Type: CHRONIC Route: GAVAGE

Species/Strain: RATS/HSD

P08: STATISTICAL ANALYSIS OF PRIMARY TUMORS

Black Cohosh

CAS Number: 84776-26-1

Date Report Requested: 09/06/2021 Time Report Requested: 15:59:32 First Dose M/F: 07/03/12 / 07/02/12

Lab: BAT

			Females	
DOSE	0 mg/kg female	75 mg/kg female	250 mg/kg female	750 mg/kg female
Mammary Gland Fibroma, Fibroadenoma or	Adenoma			
TUMOR RATES	#	#	#	#
OVERALL (a)	29/50 (58%)	31/50 (62%)	23/50 (46%)	13/50 (26%)
LITTERS (b)	18/25 (72%)	23/25 (92%)	18/25 (72%)	12/25 (48%)
POLY-3 RATE (c)	29/48.20	31/45.79	23/45.99	13/38.33
POLY-3 PERCENT (g)	60.2%	67.7%	50%	33.9%
TERMINAL (d)	13/28 (46%)	16/24 (67%)	14/29 (48%)	6/20 (30%)
FIRST INCIDENCE	499	386	360	571
STATISTICAL TESTS				
POLY 3	P=0.002N**	P=0.289	P=0.213N	P=0.011N*
POLY 1.5	P<0.001N**	P=0.330	P=0.185N	P=0.004N**
POLY 6	P=0.007N**	P=0.250	P=0.265N	P=0.034N*
RAO-SCOTT	P=0.002N**	P=0.301	P=0.226N	P=0.016N*
LITTER C-A/FISHERS	P=0.003N**	P=0.069	P=0.623	P=0.074N

Test Type: CHRONIC Route: GAVAGE

Species/Strain: RATS/HSD

P08: STATISTICAL ANALYSIS OF PRIMARY TUMORS

Black Cohosh

CAS Number: 84776-26-1

Date Report Requested: 09/06/2021 Time Report Requested: 15:59:32 First Dose M/F: 07/03/12 / 07/02/12

Lab: BAT

			Females	
DOSE	0 mg/kg female	75 mg/kg female	250 mg/kg female	750 mg/kg female
Mammary Gland Fibroma, Fibroadenoma, Ca	arcinoma, or Adenoma			
TUMOR RATES	#	#	#	#
OVERALL (a)	30/50 (60%)	32/50 (64%)	23/50 (46%)	15/50 (30%)
LITTERS (b)	19/25 (76%)	23/25 (92%)	18/25 (72%)	12/25 (48%)
POLY-3 RATE (c)	30/48.48	32/45.99	23/45.99	15/38.92
POLY-3 PERCENT (g)	61.9%	69.6%	50%	38.5%
TERMINAL (d)	13/28 (46%)	16/24 (67%)	14/29 (48%)	6/20 (30%)
FIRST INCIDENCE	499	386	360	571
STATISTICAL TESTS				
POLY 3	P=0.004N**	P=0.281	P=0.165N	P=0.021N*
POLY 1.5	P<0.001N**	P=0.324	P=0.139N	P=0.009N**
POLY 6	P=0.013N*	P=0.240	P=0.218N	P=0.060N
RAO-SCOTT	P=0.006N**	P=0.297	P=0.184N	P=0.031N*
LITTER C-A/FISHERS	P=0.002N**	P=0.123	P=0.500N	P=0.040N*

Test Type: CHRONIC Route: GAVAGE

Species/Strain: RATS/HSD

P08: STATISTICAL ANALYSIS OF PRIMARY TUMORS

Black Cohosh

CAS Number: 84776-26-1

Date Report Requested: 09/06/2021 Time Report Requested: 15:59:32 First Dose M/F: 07/03/12 / 07/02/12

Lab: BAT

			Females	
DOSE	0 mg/kg female	75 mg/kg female	250 mg/kg female	750 mg/kg female
Pancreas				
Adenoma TUMOR RATES				
OVERALL (a)	0/50 (0%)	0/50 (0%)	0/50 (0%)	1/49 (2%)
LITTERS (b)	0/25 (0%)	0/25 (0%)	0/25 (0%)	1/25 (4%)
POLY-3 RATE (c)	0/41.83	0/39.18	0/42.83	1/35.52
POLY-3 PERCENT (g)	0%	0%	0%	2.8%
TERMINAL (d)	0/28 (0%)	0/24 (0%)	0/29 (0%)	1/20 (5%)
FIRST INCIDENCE				729 (T)
STATISTICAL TESTS				
POLY 3	(n)	(n)	(n)	(n)
POLY 1.5	(n)	(n)	(n)	(n)
POLY 6	(n)	(n)	(n)	(n)
RAO-SCOTT	(n)	(n)	(n)	(n)
LITTER C-A/FISHERS	(n)	(n)	(n)	(n)

Test Type: CHRONIC Route: GAVAGE

Species/Strain: RATS/HSD

P08: STATISTICAL ANALYSIS OF PRIMARY TUMORS

Black Cohosh

CAS Number: 84776-26-1

Date Report Requested: 09/06/2021 Time Report Requested: 15:59:32 First Dose M/F: 07/03/12 / 07/02/12

Lab: BAT

			Females	
DOSE	0 mg/kg female	75 mg/kg female	250 mg/kg female	750 mg/kg female
Pancreas Carcinoma or Adenoma				
TUMOR RATES				
OVERALL (a)	0/50 (0%)	0/50 (0%)	0/50 (0%)	1/49 (2%)
LITTERS (b)	0/25 (0%)	0/25 (0%)	0/25 (0%)	1/25 (4%)
POLY-3 RATE (c)	0/41.83	0/39.18	0/42.83	1/35.52
POLY-3 PERCENT (g)	0%	0%	0%	2.8%
TERMINAL (d)	0/28 (0%)	0/24 (0%)	0/29 (0%)	1/20 (5%)
FIRST INCIDENCE				729 (T)
STATISTICAL TESTS				
POLY 3	(n)	(n)	(n)	(n)
POLY 1.5	(n)	(n)	(n)	(n)
POLY 6	(n)	(n)	(n)	(n)
RAO-SCOTT	(n)	(n)	(n)	(n)
LITTER C-A/FISHERS	(n)	(n)	(n)	(n)

Test Type: CHRONIC Route: GAVAGE

Species/Strain: RATS/HSD

P08: STATISTICAL ANALYSIS OF PRIMARY TUMORS

Black Cohosh

CAS Number: 84776-26-1

Date Report Requested: 09/06/2021 Time Report Requested: 15:59:32 First Dose M/F: 07/03/12 / 07/02/12

Lab: BAT

			Females	
DOSE	0 mg/kg female	75 mg/kg female	250 mg/kg female	750 mg/kg female
Pituitary Gland: Pars Distali Adenoma	is or Unspecified Site			
TUMOR RATES				
OVERALL (a)	20/50 (40%)	18/50 (36%)	20/50 (40%)	11/50 (22%)
LITTERS (b)	15/25 (60%)	13/25 (52%)	15/25 (60%)	10/25 (40%)
POLY-3 RATE (c)	20/44.95	18/42.92	20/46.11	11/37.22
POLY-3 PERCENT (g)	44.5%	41.9%	43.4%	29.6%
TERMINAL (d)	11/28 (39%)	7/24 (29%)	9/29 (31%)	7/20 (35%)
FIRST INCIDENCE	499	332	538	551
STATISTICAL TESTS				
POLY 3	P=0.103N	P=0.490N	P=0.542N	P=0.118N
POLY 1.5	P=0.065N	P=0.472N	P=0.564N	P=0.079N
POLY 6	P=0.177N	P=0.491N	P=0.505N	P=0.190N
RAO-SCOTT	P=0.112N	P=0.494N	P=0.544N	P=0.141N
LITTER C-A/FISHERS	P=0.113N	P=0.388N	P=0.613	P=0.129N

Test Type: CHRONIC Route: GAVAGE

Species/Strain: RATS/HSD

P08: STATISTICAL ANALYSIS OF PRIMARY TUMORS

Black Cohosh CAS Number: 84776-26-1

Date Report Requested: 09/06/2021 Time Report Requested: 15:59:32 First Dose M/F: 07/03/12 / 07/02/12

Lab: BAT

			Females	
DOSE	0 mg/kg female	75 mg/kg female	250 mg/kg female	750 mg/kg female
Skin Basal or Sq. Cell Carcinoma	a Carcinoma Basoso Tur	mor (M or B) Basal Cell A	udenoma Adenoma Pani	illoma, Sq Papilloma, Keratoacanthoma, Trichoepithelioma
TUMOR RATES	#	#	#	#
OVERALL (a)	0/50 (0%)	1/50 (2%)	0/50 (0%)	1/50 (2%)
LITTERS (b)	0/25 (0%)	1/25 (4%)	0/25 (0%)	1/25 (4%)
POLY-3 RATE (c)	0/41.83	1/39.18	0/42.83	1/36.18
POLY-3 PERCENT (g)	0%	2.6%	0%	2.8%
TERMINAL (d)	0/28 (0%)	1/24 (4%)	0/29 (0%)	0/20 (0%)
FIRST INCIDENCE		729 (T)		637
STATISTICAL TESTS				
POLY 3	(n)	(n)	(n)	(n)
POLY 1.5	(n)	(n)	(n)	(n)
POLY 6	(n)	(n)	(n)	(n)
RAO-SCOTT	(n)	(n)	(n)	(n)
LITTER C-A/FISHERS	(n)	(n)	(n)	(n)

Test Type: CHRONIC Route: GAVAGE

Species/Strain: RATS/HSD

P08: STATISTICAL ANALYSIS OF PRIMARY TUMORS

Black Cohosh

CAS Number: 84776-26-1

Date Report Requested: 09/06/2021 Time Report Requested: 15:59:32 First Dose M/F: 07/03/12 / 07/02/12

Lab: BAT

			Females	
DOSE	0 mg/kg female	75 mg/kg female	250 mg/kg female	750 mg/kg female
Skin				
Fibroma				
TUMOR RATES	#	#	#	#
OVERALL (a)	0/50 (0%)	2/50 (4%)	0/50 (0%)	1/50 (2%)
LITTERS (b)	0/25 (0%)	2/25 (8%)	0/25 (0%)	1/25 (4%)
POLY-3 RATE (c)	0/41.83	2/40.12	0/42.83	1/36.19
POLY-3 PERCENT (g)	0%	5%	0%	2.8%
TERMINAL (d)	0/28 (0%)	0/24 (0%)	0/29 (0%)	0/20 (0%)
FIRST INCIDENCE		302		635
STATISTICAL TESTS				
POLY 3	P=0.580	P=0.227	(e)	P=0.471
POLY 1.5	P=0.595	P=0.231	(e)	P=0.482
POLY 6	P=0.561	P=0.225	(e)	P=0.457
RAO-SCOTT	P=0.588	P=0.319	(e)	P=0.530
LITTER C-A/FISHERS	P=0.623	P=0.245	(e)	P=0.500

Test Type: CHRONIC Route: GAVAGE

Species/Strain: RATS/HSD

P08: STATISTICAL ANALYSIS OF PRIMARY TUMORS

Black Cohosh CAS Number: 84776-26-1

Date Report Requested: 09/06/2021 Time Report Requested: 15:59:32 First Dose M/F: 07/03/12 / 07/02/12

Lab: BAT

			Females	
DOSE	0 mg/kg female	75 mg/kg female	250 mg/kg female	750 mg/kg female
Skin				
Fibroma, Fibrosarcoma, Sa	rcoma, Myxoma, Myxosard	coma, Malignant Fibrous	Histiocytoma, or Heman	giopericytoma
TUMOR RATES	#	#	#	#
OVERALL (a)	0/50 (0%)	2/50 (4%)	0/50 (0%)	1/50 (2%)
LITTERS (b)	0/25 (0%)	2/25 (8%)	0/25 (0%)	1/25 (4%)
POLY-3 RATE (c)	0/41.83	2/40.12	0/42.83	1/36.19
POLY-3 PERCENT (g)	0%	5%	0%	2.8%
TERMINAL (d)	0/28 (0%)	0/24 (0%)	0/29 (0%)	0/20 (0%)
FIRST INCIDENCE		302		635
STATISTICAL TESTS				
POLY 3	P=0.580	P=0.227	(e)	P=0.471
POLY 1.5	P=0.595	P=0.231	(e)	P=0.482
POLY 6	P=0.561	P=0.225	(e)	P=0.457
RAO-SCOTT	P=0.588	P=0.319	(e)	P=0.530
LITTER C-A/FISHERS	P=0.623	P=0.245	(e)	P=0.500

Test Type: CHRONIC Route: GAVAGE

Species/Strain: RATS/HSD

P08: STATISTICAL ANALYSIS OF PRIMARY TUMORS

Black Cohosh

CAS Number: 84776-26-1

Date Report Requested: 09/06/2021 **Time Report Requested:** 15:59:32 **First Dose M/F:** 07/03/12 / 07/02/12

Lab: BAT

			Females	
DOSE	0 mg/kg female	75 mg/kg female	250 mg/kg female	750 mg/kg female
Skin				
Fibroma, Fibrosarcoma, Sa	rcoma, Myxoma, Myxosard	coma, or Malignant Fibro	us Histiocytoma	
TUMOR RATES	#	#	#	#
OVERALL (a)	0/50 (0%)	2/50 (4%)	0/50 (0%)	1/50 (2%)
LITTERS (b)	0/25 (0%)	2/25 (8%)	0/25 (0%)	1/25 (4%)
POLY-3 RATE (c)	0/41.83	2/40.12	0/42.83	1/36.19
POLY-3 PERCENT (g)	0%	5%	0%	2.8%
TERMINAL (d)	0/28 (0%)	0/24 (0%)	0/29 (0%)	0/20 (0%)
FIRST INCIDENCE		302		635
STATISTICAL TESTS				
POLY 3	P=0.580	P=0.227	(e)	P=0.471
POLY 1.5	P=0.595	P=0.231	(e)	P=0.482
POLY 6	P=0.561	P=0.225	(e)	P=0.457
RAO-SCOTT	P=0.588	P=0.319	(e)	P=0.530
LITTER C-A/FISHERS	P=0.623	P=0.245	(e)	P=0.500

Test Type: CHRONIC Route: GAVAGE

Species/Strain: RATS/HSD

P08: STATISTICAL ANALYSIS OF PRIMARY TUMORS

Black Cohosh CAS Number: 84776-26-1

Date Report Requested: 09/06/2021 Time Report Requested: 15:59:32 First Dose M/F: 07/03/12 / 07/02/12

Lab: BAT

			Females	
DOSE	0 mg/kg female	75 mg/kg female	250 mg/kg female	750 mg/kg female
Skin				
Fibrosarcoma, Sarcoma, M	yxosarcoma, or Malignant	Fibrous Histiocytoma		
TUMOR RATES	#	#	#	#
OVERALL (a)	0/50 (0%)	0/50 (0%)	0/50 (0%)	0/50 (0%)
LITTERS (b)	0/25 (0%)	0/25 (0%)	0/25 (0%)	0/25 (0%)
POLY-3 RATE (c)	0/41.83	0/39.18	0/42.83	0/35.85
POLY-3 PERCENT (g)	0%	0%	0%	0%
TERMINAL (d)	0/28 (0%)	0/24 (0%)	0/29 (0%)	0/20 (0%)
FIRST INCIDENCE				
STATISTICAL TESTS				
POLY 3	(n)	(n)	(n)	(n)
POLY 1.5	(n)	(n)	(n)	(n)
POLY 6	(n)	(n)	(n)	(n)
RAO-SCOTT	(n)	(n)	(n)	(n)
LITTER C-A/FISHERS	(n)	(n)	(n)	(n)

Test Type: CHRONIC Route: GAVAGE

Species/Strain: RATS/HSD

P08: STATISTICAL ANALYSIS OF PRIMARY TUMORS

Black Cohosh
CAS Number: 84776-26-1

Date Report Requested: 09/06/2021 Time Report Requested: 15:59:32 First Dose M/F: 07/03/12 / 07/02/12

Lab: BAT

			Females	
DOSE	0 mg/kg female	75 mg/kg female	250 mg/kg female	750 mg/kg female
Skin Keratoacanthoma				
TUMOR RATES	#	#	#	#
OVERALL (a)	0/50 (0%)	1/50 (2%)	0/50 (0%)	0/50 (0%)
LITTERS (b)	0/25 (0%)	1/25 (4%)	0/25 (0%)	0/25 (0%)
POLY-3 RATE (c)	0/41.83	1/39.18	0/42.83	0/35.85
POLY-3 PERCENT (g)	0%	2.6%	0%	0%
TERMINAL (d)	0/28 (0%)	1/24 (4%)	0/29 (0%)	0/20 (0%)
FIRST INCIDENCE		729 (T)		
STATISTICAL TESTS				
POLY 3	(n)	(n)	(n)	(n)
POLY 1.5	(n)	(n)	(n)	(n)
POLY 6	(n)	(n)	(n)	(n)
RAO-SCOTT	(n)	(n)	(n)	(n)
LITTER C-A/FISHERS	(n)	(n)	(n)	(n)

Test Type: CHRONIC Route: GAVAGE

Species/Strain: RATS/HSD

P08: STATISTICAL ANALYSIS OF PRIMARY TUMORS

Black Cohosh

CAS Number: 84776-26-1

Date Report Requested: 09/06/2021 Time Report Requested: 15:59:32 First Dose M/F: 07/03/12 / 07/02/12

Lab: BAT

			Females	
DOSE	0 mg/kg female	75 mg/kg female	250 mg/kg female	750 mg/kg female
Skin Lipoma				
TUMOR RATES	#	#	#	#
OVERALL (a)	1/50 (2%)	0/50 (0%)	0/50 (0%)	0/50 (0%)
LITTERS (b)	1/25 (4%)	0/25 (0%)	0/25 (0%)	0/25 (0%)
POLY-3 RATE (c)	1/41.83	0/39.18	0/42.83	0/35.85
POLY-3 PERCENT (g)	2.4%	0%	0%	0%
TERMINAL (d)	1/28 (4%)	0/24 (0%)	0/29 (0%)	0/20 (0%)
FIRST INCIDENCE	729 (T)			
STATISTICAL TESTS				
POLY 3	(n)	(n)	(n)	(n)
POLY 1.5	(n)	(n)	(n)	(n)
POLY 6	(n)	(n)	(n)	(n)
RAO-SCOTT	(n)	(n)	(n)	(n)
LITTER C-A/FISHERS	(n)	(n)	(n)	(n)

Test Type: CHRONIC Route: GAVAGE

Species/Strain: RATS/HSD

P08: STATISTICAL ANALYSIS OF PRIMARY TUMORS

Black Cohosh
CAS Number: 84776-26-1

Date Report Requested: 09/06/2021 Time Report Requested: 15:59:32 First Dose M/F: 07/03/12 / 07/02/12

Lab: BAT

	Females				
DOSE	0 mg/kg female	75 mg/kg female	250 mg/kg female	750 mg/kg female	
Skin Squamous Cell Papilloma, l	Papilloma, Squamous Cell	Carcinoma or Keratoaca	ınthoma		
TUMOR RATES	#	#	#	#	
OVERALL (a)	0/50 (0%)	1/50 (2%)	0/50 (0%)	1/50 (2%)	
LITTERS (b)	0/25 (0%)	1/25 (4%)	0/25 (0%)	1/25 (4%)	
POLY-3 RATE (c)	0/41.83	1/39.18	0/42.83	1/36.18	
POLY-3 PERCENT (g)	0%	2.6%	0%	2.8%	
TERMINAL (d)	0/28 (0%)	1/24 (4%)	0/29 (0%)	0/20 (0%)	
FIRST INCIDENCE		729 (T)		637	
STATISTICAL TESTS					
POLY 3	(n)	(n)	(n)	(n)	
POLY 1.5	(n)	(n)	(n)	(n)	
POLY 6	(n)	(n)	(n)	(n)	
RAO-SCOTT	(n)	(n)	(n)	(n)	
LITTER C-A/FISHERS	(n)	(n)	(n)	(n)	

Test Type: CHRONIC Route: GAVAGE

Species/Strain: RATS/HSD

P08: STATISTICAL ANALYSIS OF PRIMARY TUMORS

Black Cohosh

CAS Number: 84776-26-1

Date Report Requested: 09/06/2021 Time Report Requested: 15:59:32 First Dose M/F: 07/03/12 / 07/02/12

Lab: BAT

			Females	
DOSE	0 mg/kg female	75 mg/kg female	250 mg/kg female	750 mg/kg female
Skin				
Squamous Cell Papilloma, I	Papilloma, or Keratoacantl	noma		
TUMOR RATES	#	#	#	#
OVERALL (a)	0/50 (0%)	1/50 (2%)	0/50 (0%)	0/50 (0%)
LITTERS (b)	0/25 (0%)	1/25 (4%)	0/25 (0%)	0/25 (0%)
POLY-3 RATE (c)	0/41.83	1/39.18	0/42.83	0/35.85
POLY-3 PERCENT (g)	0%	2.6%	0%	0%
TERMINAL (d)	0/28 (0%)	1/24 (4%)	0/29 (0%)	0/20 (0%)
FIRST INCIDENCE		729 (T)		
STATISTICAL TESTS				
POLY 3	(n)	(n)	(n)	(n)
POLY 1.5	(n)	(n)	(n)	(n)
POLY 6	(n)	(n)	(n)	(n)
RAO-SCOTT	(n)	(n)	(n)	(n)
LITTER C-A/FISHERS	(n)	(n)	(n)	(n)

Test Type: CHRONIC Route: GAVAGE

Species/Strain: RATS/HSD

P08: STATISTICAL ANALYSIS OF PRIMARY TUMORS

Black Cohosh

CAS Number: 84776-26-1

Date Report Requested: 09/06/2021 Time Report Requested: 15:59:32 First Dose M/F: 07/03/12 / 07/02/12

Lab: BAT

Females					
DOSE	0 mg/kg female	75 mg/kg female	250 mg/kg female	750 mg/kg female	
Thyroid Gland: C-Cell Adenoma					
TUMOR RATES					
OVERALL (a)	9/50 (18%)	11/49 (22%)	10/50 (20%)	10/49 (20%)	
LITTERS (b)	8/25 (32%)	10/25 (40%)	9/25 (36%)	9/25 (36%)	
POLY-3 RATE (c)	9/42.15	11/39.39	10/43.77	10/37.94	
POLY-3 PERCENT (g)	21.4%	27.9%	22.9%	26.4%	
TERMINAL (d)	7/28 (25%)	6/23 (26%)	7/29 (24%)	5/20 (25%)	
FIRST INCIDENCE	655	629	538	548	
STATISTICAL TESTS					
POLY 3	P=0.447	P=0.332	P=0.537	P=0.396	
POLY 1.5	P=0.475	P=0.344	P=0.520	P=0.424	
POLY 6	P=0.406	P=0.330	P=0.557	P=0.360	
RAO-SCOTT	P=0.438	P=0.322	P=0.525	P=0.381	
LITTER C-A/FISHERS	P=0.550	P=0.384	P=0.500	P=0.500	

Test Type: CHRONIC Route: GAVAGE

Species/Strain: RATS/HSD

P08: STATISTICAL ANALYSIS OF PRIMARY TUMORS

Black Cohosh

CAS Number: 84776-26-1

Date Report Requested: 09/06/2021 Time Report Requested: 15:59:32 First Dose M/F: 07/03/12 / 07/02/12

Lab: BAT

			Females		
DOSE	0 mg/kg female	75 mg/kg female	250 mg/kg female	750 mg/kg female	
Thyroid Gland: C-Cell Carcinoma					
TUMOR RATES					
OVERALL (a)	0/50 (0%)	2/49 (4%)	0/50 (0%)	0/49 (0%)	
LITTERS (b)	0/25 (0%)	1/25 (4%)	0/25 (0%)	0/25 (0%)	
POLY-3 RATE (c)	0/41.83	2/38.59	0/42.83	0/35.52	
POLY-3 PERCENT (g)	0%	5.2%	0%	0%	
TERMINAL (d)	0/28 (0%)	0/23 (0%)	0/29 (0%)	0/20 (0%)	
FIRST INCIDENCE		634			
STATISTICAL TESTS					
POLY 3	P=0.397N	P=0.219	(e)	(e)	
POLY 1.5	P=0.389N	P=0.223	(e)	(e)	
POLY 6	P=0.404N	P=0.216	(e)	(e)	
RAO-SCOTT	P=0.588N	P=0.531	(e)	(e)	
LITTER C-A/FISHERS	P=0.577N	P=0.500	(e)	(e)	

Test Type: CHRONIC Route: GAVAGE

Species/Strain: RATS/HSD

P08: STATISTICAL ANALYSIS OF PRIMARY TUMORS

Black Cohosh
CAS Number: 84776-26-1

Date Report Requested: 09/06/2021 Time Report Requested: 15:59:32 First Dose M/F: 07/03/12 / 07/02/12

Lab: BAT

			Females	
DOSE	0 mg/kg female	75 mg/kg female	250 mg/kg female	750 mg/kg female
Thyroid Gland: C-Cell Carcinoma or Adenoma				
TUMOR RATES				
OVERALL (a)	9/50 (18%)	12/49 (24%)	10/50 (20%)	10/49 (20%)
LITTERS (b)	8/25 (32%)	10/25 (40%)	9/25 (36%)	9/25 (36%)
POLY-3 RATE (c)	9/42.15	12/39.46	10/43.77	10/37.94
POLY-3 PERCENT (g)	21.4%	30.4%	22.9%	26.4%
TERMINAL (d)	7/28 (25%)	6/23 (26%)	7/29 (24%)	5/20 (25%)
FIRST INCIDENCE	655	629	538	548
STATISTICAL TESTS				
POLY 3	P=0.491	P=0.246	P=0.537	P=0.396
POLY 1.5	P=0.520	P=0.257	P=0.520	P=0.424
POLY 6	P=0.449	P=0.244	P=0.557	P=0.360
RAO-SCOTT	P=0.486	P=0.248	P=0.529	P=0.388
LITTER C-A/FISHERS	P=0.550	P=0.384	P=0.500	P=0.500

Test Type: CHRONIC Route: GAVAGE

Species/Strain: RATS/HSD

P08: STATISTICAL ANALYSIS OF PRIMARY TUMORS

Black Cohosh

CAS Number: 84776-26-1

Date Report Requested: 09/06/2021 Time Report Requested: 15:59:32 First Dose M/F: 07/03/12 / 07/02/12

Lab: BAT

			Females	
DOSE	0 mg/kg female	75 mg/kg female	250 mg/kg female	750 mg/kg female
Uterus (excluding Uterus, C Adenocarcinoma	Cervix)			
TUMOR RATES				
OVERALL (a)	2/50 (4%)	2/50 (4%)	5/50 (10%)	4/49 (8%)
LITTERS (b)	2/25 (8%)	2/25 (8%)	5/25 (20%)	3/25 (12%)
POLY-3 RATE (c)	2/42.06	2/39.53	5/43.93	4/35.67
POLY-3 PERCENT (g)	4.8%	5.1%	11.4%	11.2%
TERMINAL (d)	1/28 (4%)	1/24 (4%)	3/29 (10%)	1/20 (5%)
FIRST INCIDENCE	670	629	538	641
STATISTICAL TESTS				
POLY 3	P=0.184	P=0.672	P=0.233	P=0.263
POLY 1.5	P=0.208	P=0.678	P=0.226	P=0.287
POLY 6	P=0.156	P=0.667	P=0.242	P=0.235
RAO-SCOTT	P=0.216	P=0.664	P=0.278	P=0.292
LITTER C-A/FISHERS	P=0.427	P=0.695	P=0.209	P=0.500

Test Type: CHRONIC Route: GAVAGE

Species/Strain: RATS/HSD

P08: STATISTICAL ANALYSIS OF PRIMARY TUMORS

Black Cohosh

CAS Number: 84776-26-1

Date Report Requested: 09/06/2021 Time Report Requested: 15:59:32 First Dose M/F: 07/03/12 / 07/02/12

Lab: BAT

Females				
DOSE	0 mg/kg female	75 mg/kg female	250 mg/kg female	750 mg/kg female
Uterus (excluding Uterus, C				
Adenocarcinoma or Adenor	na			
TUMOR RATES				
OVERALL (a)	2/50 (4%)	3/50 (6%)	5/50 (10%)	4/49 (8%)
LITTERS (b)	2/25 (8%)	3/25 (12%)	5/25 (20%)	3/25 (12%)
POLY-3 RATE (c)	2/42.06	3/39.60	5/43.93	4/35.67
POLY-3 PERCENT (g)	4.8%	7.6%	11.4%	11.2%
TERMINAL (d)	1/28 (4%)	1/24 (4%)	3/29 (10%)	1/20 (5%)
FIRST INCIDENCE	670	629	538	641
STATISTICAL TESTS				
POLY 3	P=0.241	P=0.473	P=0.233	P=0.263
POLY 1.5	P=0.269	P=0.480	P=0.226	P=0.287
POLY 6	P=0.206	P=0.467	P=0.242	P=0.235
RAO-SCOTT	P=0.264	P=0.480	P=0.268	P=0.283
LITTER C-A/FISHERS	P=0.508	P=0.500	P=0.209	P=0.500

Test Type: CHRONIC Route: GAVAGE

Species/Strain: RATS/HSD

P08: STATISTICAL ANALYSIS OF PRIMARY TUMORS

Black Cohosh

CAS Number: 84776-26-1

Date Report Requested: 09/06/2021 Time Report Requested: 15:59:32 First Dose M/F: 07/03/12 / 07/02/12

Lab: BAT

			Famalas	
			Females	
DOSE	0 mg/kg female	75 mg/kg female	250 mg/kg female	750 mg/kg female
Uterus (excluding Uterus, Ce Adenocarcinoma, Adenoma,		apilloma Sq		
TUMOR RATES				
OVERALL (a)	4/50 (8%)	4/50 (8%)	8/50 (16%)	5/49 (10%)
LITTERS (b)	4/25 (16%)	4/25 (16%)	8/25 (32%)	4/25 (16%)
POLY-3 RATE (c)	4/42.06	4/39.81	8/44.57	5/35.78
POLY-3 PERCENT (g)	9.5%	10.1%	18%	14%
TERMINAL (d)	3/28 (11%)	1/24 (4%)	4/29 (14%)	1/20 (5%)
FIRST INCIDENCE	670	629	538	641
STATISTICAL TESTS				
POLY 3	P=0.328	P=0.614	P=0.204	P=0.399
POLY 1.5	P=0.368	P=0.621	P=0.192	P=0.431
POLY 6	P=0.280	P=0.610	P=0.221	P=0.359
RAO-SCOTT	P=0.337	P=0.598	P=0.219	P=0.390
LITTER C-A/FISHERS	P=0.559N	P=0.649	P=0.160	P=0.649

Test Type: CHRONIC Route: GAVAGE

Species/Strain: RATS/HSD

P08: STATISTICAL ANALYSIS OF PRIMARY TUMORS

Black Cohosh
CAS Number: 84776-26-1

Date Report Requested: 09/06/2021 Time Report Requested: 15:59:32 First Dose M/F: 07/03/12 / 07/02/12

Lab: BAT

			Females	
DOSE	0 mg/kg female	75 mg/kg female	250 mg/kg female	750 mg/kg female
Uterus (excluding Uterus, C	cervix)			
Leiomyoma, Leiomyosarco		na, Sarcoma Stromal, or	Schwannoma Malignant	
TUMOR RATES				
OVERALL (a)	9/50 (18%)	5/50 (10%)	6/50 (12%)	3/49 (6%)
LITTERS (b)	9/25 (36%)	5/25 (20%)	6/25 (24%)	3/25 (12%)
POLY-3 RATE (c)	9/41.83	5/39.24	6/43.51	3/35.54
POLY-3 PERCENT (g)	21.5%	12.7%	13.8%	8.4%
TERMINAL (d)	9/28 (32%)	4/24 (17%)	3/29 (10%)	1/20 (5%)
FIRST INCIDENCE	729 (T)	712	643	617
STATISTICAL TESTS				
POLY 3	P=0.124N	P=0.225N	P=0.256N	P=0.100N
POLY 1.5	P=0.110N	P=0.217N	P=0.272N	P=0.086N
POLY 6	P=0.143N	P=0.231N	P=0.236N	P=0.123N
RAO-SCOTT	P=0.120N	P=0.218N	P=0.252N	P=0.097N
LITTER C-A/FISHERS	P=0.071N	P=0.173N	P=0.269N	P=0.048N*

Test Type: CHRONIC Route: GAVAGE

Species/Strain: RATS/HSD

P08: STATISTICAL ANALYSIS OF PRIMARY TUMORS

Black Cohosh

CAS Number: 84776-26-1

Date Report Requested: 09/06/2021 Time Report Requested: 15:59:32 First Dose M/F: 07/03/12 / 07/02/12

Lab: BAT

			Females	
DOSE	0 mg/kg female	75 mg/kg female	250 mg/kg female	750 mg/kg female
Uterus (excluding Uterus, C Papilloma Squamous	Cervix)			
TUMOR RATES				
OVERALL (a)	1/50 (2%)	1/50 (2%)	4/50 (8%)	0/49 (0%)
LITTERS (b)	1/25 (4%)	1/25 (4%)	4/25 (16%)	0/25 (0%)
POLY-3 RATE (c)	1/41.83	1/39.38	4/43.47	0/34.89
POLY-3 PERCENT (g)	2.4%	2.5%	9.2%	0%
TERMINAL (d)	1/28 (4%)	0/24 (0%)	2/29 (7%)	0/20 (0%)
FIRST INCIDENCE	729 (T)	675	638	
STATISTICAL TESTS				
POLY 3	P=0.423N	P=0.747	P=0.190	P=0.536N
POLY 1.5	P=0.392N	P=0.751	P=0.185	P=0.524N
POLY 6	P=0.470N	P=0.745	P=0.197	P=0.553N
RAO-SCOTT	P=0.397N	P=0.733	P=0.232	P=0.527N
LITTER C-A/FISHERS	P=0.339N	P=0.755	P=0.174	P=0.500N

Test Type: CHRONIC Route: GAVAGE

Species/Strain: RATS/HSD

P08: STATISTICAL ANALYSIS OF PRIMARY TUMORS

Black Cohosh

CAS Number: 84776-26-1

Date Report Requested: 09/06/2021 Time Report Requested: 15:59:32 First Dose M/F: 07/03/12 / 07/02/12

Lab: BAT

			Females	
DOSE	0 mg/kg female	75 mg/kg female	250 mg/kg female	750 mg/kg female
Uterus (excluding Uterus, C Polyp Stromal	Cervix)			
TUMOR RATES				
OVERALL (a)	9/50 (18%)	4/50 (8%)	6/50 (12%)	3/49 (6%)
LITTERS (b)	9/25 (36%)	4/25 (16%)	6/25 (24%)	3/25 (12%)
POLY-3 RATE (c)	9/41.83	4/39.18	6/43.51	3/35.54
POLY-3 PERCENT (g)	21.5%	10.2%	13.8%	8.4%
TERMINAL (d)	9/28 (32%)	4/24 (17%)	3/29 (10%)	1/20 (5%)
FIRST INCIDENCE	729 (T)	729 (T)	643	617
STATISTICAL TESTS				
POLY 3	P=0.148N	P=0.137N	P=0.256N	P=0.100N
POLY 1.5	P=0.134N	P=0.132N	P=0.272N	P=0.086N
POLY 6	P=0.169N	P=0.142N	P=0.236N	P=0.123N
RAO-SCOTT	P=0.147N	P=0.136N	P=0.254N	P=0.098N
LITTER C-A/FISHERS	P=0.091N	P=0.098N	P=0.269N	P=0.048N*

Test Type: CHRONIC Route: GAVAGE

Species/Strain: RATS/HSD

P08: STATISTICAL ANALYSIS OF PRIMARY TUMORS

Black Cohosh

CAS Number: 84776-26-1

Date Report Requested: 09/06/2021 Time Report Requested: 15:59:32 First Dose M/F: 07/03/12 / 07/02/12

Lab: BAT

			Females	
DOSE	0 mg/kg female	75 mg/kg female	250 mg/kg female	750 mg/kg female
Uterus (excluding Uterus, C	Cervix)			
Squamous Cell Carcinoma				
TUMOR RATES				
OVERALL (a)	1/50 (2%)	0/50 (0%)	2/50 (4%)	1/49 (2%)
LITTERS (b)	1/25 (4%)	0/25 (0%)	2/25 (8%)	1/25 (4%)
POLY-3 RATE (c)	1/41.83	0/39.18	2/43.47	1/35.00
POLY-3 PERCENT (g)	2.4%	0%	4.6%	2.9%
TERMINAL (d)	1/28 (4%)	0/24 (0%)	0/29 (0%)	0/20 (0%)
FIRST INCIDENCE	729 (T)		638	702
STATISTICAL TESTS				
POLY 3	P=0.489	P=0.513N	P=0.513	P=0.720
POLY 1.5	P=0.512	P=0.509N	P=0.507	P=0.734
POLY 6	P=0.455	P=0.516N	P=0.522	P=0.700
RAO-SCOTT	P=0.483	P=0.512N	P=0.524	P=0.690
LITTER C-A/FISHERS	P=0.552	P=0.500N	P=0.500	P=0.755

Test Type: CHRONIC Route: GAVAGE

Species/Strain: RATS/HSD

P08: STATISTICAL ANALYSIS OF PRIMARY TUMORS

Black Cohosh

CAS Number: 84776-26-1

Date Report Requested: 09/06/2021 Time Report Requested: 15:59:32 First Dose M/F: 07/03/12 / 07/02/12

Lab: BAT

			Females	
DOSE	0 mg/kg female	75 mg/kg female	250 mg/kg female	750 mg/kg female
Uterus (excluding Uterus, C Squamous Cell Carcinoma				
TUMOR RATES				
OVERALL (a)	2/50 (4%)	1/50 (2%)	4/50 (8%)	1/49 (2%)
LITTERS (b)	2/25 (8%)	1/25 (4%)	4/25 (16%)	1/25 (4%)
POLY-3 RATE (c)	2/41.83	1/39.38	4/43.47	1/35.00
POLY-3 PERCENT (g)	4.8%	2.5%	9.2%	2.9%
TERMINAL (d)	2/28 (7%)	0/24 (0%)	2/29 (7%)	0/20 (0%)
FIRST INCIDENCE	729 (T)	675	638	702
STATISTICAL TESTS				
POLY 3	P=0.543N	P=0.521N	P=0.354	P=0.562N
POLY 1.5	P=0.515N	P=0.515N	P=0.346	P=0.541N
POLY 6	P=0.584N	P=0.525N	P=0.366	P=0.590N
RAO-SCOTT	P=0.511N	P=0.507N	P=0.363	P=0.534N
LITTER C-A/FISHERS	P=0.462N	P=0.500N	P=0.334	P=0.500N

Test Type: CHRONIC Route: GAVAGE

Species/Strain: RATS/HSD

P08: STATISTICAL ANALYSIS OF PRIMARY TUMORS

Black Cohosh

CAS Number: 84776-26-1

Date Report Requested: 09/06/2021 Time Report Requested: 15:59:32 First Dose M/F: 07/03/12 / 07/02/12

Lab: BAT

			Females	
DOSE	0 mg/kg female	75 mg/kg female	250 mg/kg female	750 mg/kg female
Uterus (including Uterus, C Adenocarcinoma	ervix)			
TUMOR RATES				
OVERALL (a)	2/50 (4%)	2/50 (4%)	5/50 (10%)	4/49 (8%)
LITTERS (b)	2/25 (8%)	2/25 (8%)	5/25 (20%)	3/25 (12%)
POLY-3 RATE (c)	2/42.06	2/39.53	5/43.93	4/35.67
POLY-3 PERCENT (g)	4.8%	5.1%	11.4%	11.2%
TERMINAL (d)	1/28 (4%)	1/24 (4%)	3/29 (10%)	1/20 (5%)
FIRST INCIDENCE	670	629	538	641
STATISTICAL TESTS				
POLY 3	P=0.184	P=0.672	P=0.233	P=0.263
POLY 1.5	P=0.208	P=0.678	P=0.226	P=0.287
POLY 6	P=0.156	P=0.667	P=0.242	P=0.235
RAO-SCOTT	P=0.216	P=0.664	P=0.278	P=0.292
LITTER C-A/FISHERS	P=0.427	P=0.695	P=0.209	P=0.500

Test Type: CHRONIC Route: GAVAGE

Species/Strain: RATS/HSD

P08: STATISTICAL ANALYSIS OF PRIMARY TUMORS

Black Cohosh

CAS Number: 84776-26-1

Date Report Requested: 09/06/2021 Time Report Requested: 15:59:32 First Dose M/F: 07/03/12 / 07/02/12

Lab: BAT

			Females	
DOSE	0 mg/kg female	75 mg/kg female	250 mg/kg female	750 mg/kg female
Uterus (including Uterus, C	ervix)			
Adenocarcinoma or Adeno				
TUMOR RATES				
OVERALL (a)	2/50 (4%)	3/50 (6%)	5/50 (10%)	4/49 (8%)
LITTERS (b)	2/25 (8%)	3/25 (12%)	5/25 (20%)	3/25 (12%)
POLY-3 RATE (c)	2/42.06	3/39.60	5/43.93	4/35.67
POLY-3 PERCENT (g)	4.8%	7.6%	11.4%	11.2%
TERMINAL (d)	1/28 (4%)	1/24 (4%)	3/29 (10%)	1/20 (5%)
FIRST INCIDENCE	670	629	538	641
STATISTICAL TESTS				
POLY 3	P=0.241	P=0.473	P=0.233	P=0.263
POLY 1.5	P=0.269	P=0.480	P=0.226	P=0.287
POLY 6	P=0.206	P=0.467	P=0.242	P=0.235
RAO-SCOTT	P=0.264	P=0.480	P=0.268	P=0.283
LITTER C-A/FISHERS	P=0.508	P=0.500	P=0.209	P=0.500

Test Type: CHRONIC Route: GAVAGE

Species/Strain: RATS/HSD

P08: STATISTICAL ANALYSIS OF PRIMARY TUMORS

Black Cohosh

CAS Number: 84776-26-1

Date Report Requested: 09/06/2021 Time Report Requested: 15:59:32 First Dose M/F: 07/03/12 / 07/02/12

Lab: BAT

Females					
DOSE	0 mg/kg female	75 mg/kg female	250 mg/kg female	750 mg/kg female	
Jterus (including Uterus, Ce Adenocarcinoma, Adenoma		apilloma Sq			
TUMOR RATES					
OVERALL (a)	4/50 (8%)	4/50 (8%)	8/50 (16%)	5/49 (10%)	
LITTERS (b)	4/25 (16%)	4/25 (16%)	8/25 (32%)	4/25 (16%)	
POLY-3 RATE (c)	4/42.06	4/39.81	8/44.57	5/35.78	
POLY-3 PERCENT (g)	9.5%	10.1%	18%	14%	
TERMINAL (d)	3/28 (11%)	1/24 (4%)	4/29 (14%)	1/20 (5%)	
FIRST INCIDENCE	670	629	538	641	
STATISTICAL TESTS					
POLY 3	P=0.328	P=0.614	P=0.204	P=0.399	
POLY 1.5	P=0.368	P=0.621	P=0.192	P=0.431	
POLY 6	P=0.280	P=0.610	P=0.221	P=0.359	
RAO-SCOTT	P=0.337	P=0.598	P=0.219	P=0.390	
LITTER C-A/FISHERS	P=0.559N	P=0.649	P=0.160	P=0.649	

Test Type: CHRONIC Route: GAVAGE

Species/Strain: RATS/HSD

P08: STATISTICAL ANALYSIS OF PRIMARY TUMORS

Black Cohosh

CAS Number: 84776-26-1

Date Report Requested: 09/06/2021 Time Report Requested: 15:59:32 First Dose M/F: 07/03/12 / 07/02/12

Lab: BAT

			Females		
DOSE	0 mg/kg female	75 mg/kg female	250 mg/kg female	750 mg/kg female	
Uterus (including Uterus, C Leiomyoma, Leiomyosarco	=	ma Sarcoma Stromal or	Schwannoma Malignant		
		na, carcoma otromai, or			
TUMOR RATES					
OVERALL (a)	9/50 (18%)	6/50 (12%)	6/50 (12%)	3/49 (6%)	
LITTERS (b)	9/25 (36%)	6/25 (24%)	6/25 (24%)	3/25 (12%)	
POLY-3 RATE (c)	9/41.83	6/39.72	6/43.51	3/35.54	
POLY-3 PERCENT (g)	21.5%	15.1%	13.8%	8.4%	
TERMINAL (d)	9/28 (32%)	4/24 (17%)	3/29 (10%)	1/20 (5%)	
FIRST INCIDENCE	729 (T)	588	643	617	
STATISTICAL TESTS					
POLY 3	P=0.104N	P=0.322N	P=0.256N	P=0.100N	
POLY 1.5	P=0.092N	P=0.314N	P=0.272N	P=0.086N	
POLY 6	P=0.123N	P=0.324N	P=0.236N	P=0.123N	
RAO-SCOTT	P=0.099N	P=0.310N	P=0.250N	P=0.095N	
LITTER C-A/FISHERS	P=0.055N	P=0.269N	P=0.269N	P=0.048N*	

Test Type: CHRONIC Route: GAVAGE

Species/Strain: RATS/HSD

P08: STATISTICAL ANALYSIS OF PRIMARY TUMORS

Black Cohosh

CAS Number: 84776-26-1

Date Report Requested: 09/06/2021 Time Report Requested: 15:59:32 First Dose M/F: 07/03/12 / 07/02/12

Lab: BAT

			Females	
DOSE	0 mg/kg female	75 mg/kg female	250 mg/kg female	750 mg/kg female
Uterus (including Uterus, C Papilloma Squamous	ervix)			
TUMOR RATES				
OVERALL (a)	1/50 (2%)	1/50 (2%)	4/50 (8%)	0/49 (0%)
LITTERS (b)	1/25 (4%)	1/25 (4%)	4/25 (16%)	0/25 (0%)
POLY-3 RATE (c)	1/41.83	1/39.38	4/43.47	0/34.89
POLY-3 PERCENT (g)	2.4%	2.5%	9.2%	0%
TERMINAL (d)	1/28 (4%)	0/24 (0%)	2/29 (7%)	0/20 (0%)
FIRST INCIDENCE	729 (T)	675	638	
STATISTICAL TESTS				
POLY 3	P=0.423N	P=0.747	P=0.190	P=0.536N
POLY 1.5	P=0.392N	P=0.751	P=0.185	P=0.524N
POLY 6	P=0.470N	P=0.745	P=0.197	P=0.553N
RAO-SCOTT	P=0.397N	P=0.733	P=0.232	P=0.527N
LITTER C-A/FISHERS	P=0.339N	P=0.755	P=0.174	P=0.500N

Test Type: CHRONIC Route: GAVAGE

Species/Strain: RATS/HSD

P08: STATISTICAL ANALYSIS OF PRIMARY TUMORS

Black Cohosh

CAS Number: 84776-26-1

Date Report Requested: 09/06/2021 Time Report Requested: 15:59:32 First Dose M/F: 07/03/12 / 07/02/12

Lab: BAT

	Females				
DOSE	0 mg/kg female	75 mg/kg female	250 mg/kg female	750 mg/kg female	
Uterus (including Uterus, C Polyp Stromal	ervix)				
TUMOR RATES					
OVERALL (a)	9/50 (18%)	4/50 (8%)	6/50 (12%)	3/49 (6%)	
LITTERS (b)	9/25 (36%)	4/25 (16%)	6/25 (24%)	3/25 (12%)	
POLY-3 RATE (c)	9/41.83	4/39.18	6/43.51	3/35.54	
POLY-3 PERCENT (g)	21.5%	10.2%	13.8%	8.4%	
TERMINAL (d)	9/28 (32%)	4/24 (17%)	3/29 (10%)	1/20 (5%)	
FIRST INCIDENCE	729 (T)	729 (T)	643	617	
STATISTICAL TESTS					
POLY 3	P=0.148N	P=0.137N	P=0.256N	P=0.100N	
POLY 1.5	P=0.134N	P=0.132N	P=0.272N	P=0.086N	
POLY 6	P=0.169N	P=0.142N	P=0.236N	P=0.123N	
RAO-SCOTT	P=0.147N	P=0.136N	P=0.254N	P=0.098N	
LITTER C-A/FISHERS	P=0.091N	P=0.098N	P=0.269N	P=0.048N*	

Test Type: CHRONIC Route: GAVAGE

Species/Strain: RATS/HSD

P08: STATISTICAL ANALYSIS OF PRIMARY TUMORS

Black Cohosh

CAS Number: 84776-26-1

Date Report Requested: 09/06/2021 Time Report Requested: 15:59:32 First Dose M/F: 07/03/12 / 07/02/12

Lab: BAT

			Females	
DOSE	0 mg/kg female	75 mg/kg female	250 mg/kg female	750 mg/kg female
Uterus (including Uterus, C Squamous Cell Carcinoma				
TUMOR RATES				
OVERALL (a)	1/50 (2%)	0/50 (0%)	2/50 (4%)	1/49 (2%)
LITTERS (b)	1/25 (4%)	0/25 (0%)	2/25 (8%)	1/25 (4%)
POLY-3 RATE (c)	1/41.83	0/39.18	2/43.47	1/35.00
POLY-3 PERCENT (g)	2.4%	0%	4.6%	2.9%
TERMINAL (d)	1/28 (4%)	0/24 (0%)	0/29 (0%)	0/20 (0%)
FIRST INCIDENCE	729 (T)		638	702
STATISTICAL TESTS				
POLY 3	P=0.489	P=0.513N	P=0.513	P=0.720
POLY 1.5	P=0.512	P=0.509N	P=0.507	P=0.734
POLY 6	P=0.455	P=0.516N	P=0.522	P=0.700
RAO-SCOTT	P=0.483	P=0.512N	P=0.524	P=0.690
LITTER C-A/FISHERS	P=0.552	P=0.500N	P=0.500	P=0.755

Test Type: CHRONIC Route: GAVAGE

Species/Strain: RATS/HSD

P08: STATISTICAL ANALYSIS OF PRIMARY TUMORS

Black Cohosh

CAS Number: 84776-26-1

Date Report Requested: 09/06/2021 Time Report Requested: 15:59:32 First Dose M/F: 07/03/12 / 07/02/12

Lab: BAT

			Females	
DOSE	0 mg/kg female	75 mg/kg female	250 mg/kg female	750 mg/kg female
Uterus (including Uterus, C Squamous Cell Carcinoma	= '			
TUMOR RATES				
OVERALL (a)	2/50 (4%)	1/50 (2%)	4/50 (8%)	1/49 (2%)
LITTERS (b)	2/25 (8%)	1/25 (4%)	4/25 (16%)	1/25 (4%)
POLY-3 RATE (c)	2/41.83	1/39.38	4/43.47	1/35.00
POLY-3 PERCENT (g)	4.8%	2.5%	9.2%	2.9%
TERMINAL (d)	2/28 (7%)	0/24 (0%)	2/29 (7%)	0/20 (0%)
FIRST INCIDENCE	729 (T)	675	638	702
STATISTICAL TESTS				
POLY 3	P=0.543N	P=0.521N	P=0.354	P=0.562N
POLY 1.5	P=0.515N	P=0.515N	P=0.346	P=0.541N
POLY 6	P=0.584N	P=0.525N	P=0.366	P=0.590N
RAO-SCOTT	P=0.511N	P=0.507N	P=0.363	P=0.534N
LITTER C-A/FISHERS	P=0.462N	P=0.500N	P=0.334	P=0.500N

Test Type: CHRONIC Route: GAVAGE

Species/Strain: RATS/HSD

P08: STATISTICAL ANALYSIS OF PRIMARY TUMORS

Black Cohosh

CAS Number: 84776-26-1

Date Report Requested: 09/06/2021 Time Report Requested: 15:59:32 First Dose M/F: 07/03/12 / 07/02/12

Lab: BAT

			Females	
DOSE	0 mg/kg female	75 mg/kg female	250 mg/kg female	750 mg/kg female
Vagina Schwannoma Malignant				
TUMOR RATES	#	#	#	#
OVERALL (a)	0/50 (0%)	2/50 (4%)	0/50 (0%)	0/50 (0%)
LITTERS (b)	0/25 (0%)	2/25 (8%)	0/25 (0%)	0/25 (0%)
POLY-3 RATE (c)	0/41.83	2/39.24	0/42.83	0/35.85
POLY-3 PERCENT (g)	0%	5.1%	0%	0%
TERMINAL (d)	0/28 (0%)	1/24 (4%)	0/29 (0%)	0/20 (0%)
FIRST INCIDENCE		712		
STATISTICAL TESTS				
POLY 3	P=0.396N	P=0.223	(e)	(e)
POLY 1.5	P=0.387N	P=0.227	(e)	(e)
POLY 6	P=0.404N	P=0.219	(e)	(e)
RAO-SCOTT	P=0.460N	P=0.354	(e)	(e)
LITTER C-A/FISHERS	P=0.368N	P=0.245	(e)	(e)

Test Type: CHRONIC Route: GAVAGE

Species/Strain: RATS/HSD

P08: STATISTICAL ANALYSIS OF PRIMARY TUMORS

Black Cohosh

CAS Number: 84776-26-1

Date Report Requested: 09/06/2021 Time Report Requested: 15:59:32 First Dose M/F: 07/03/12 / 07/02/12

Lab: BAT

			Females	
DOSE	0 mg/kg female	75 mg/kg female	250 mg/kg female	750 mg/kg female
Zymbal's Gland Carcinoma or Adenoma				
TUMOR RATES	#	#	#	#
OVERALL (a)	0/50 (0%)	0/50 (0%)	0/50 (0%)	0/50 (0%)
LITTERS (b)	0/25 (0%)	0/25 (0%)	0/25 (0%)	0/25 (0%)
POLY-3 RATE (c)	0/41.83	0/39.18	0/42.83	0/35.85
POLY-3 PERCENT (g)	0%	0%	0%	0%
TERMINAL (d)	0/28 (0%)	0/24 (0%)	0/29 (0%)	0/20 (0%)
FIRST INCIDENCE				
STATISTICAL TESTS				
POLY 3	(n)	(n)	(n)	(n)
POLY 1.5	(n)	(n)	(n)	(n)
POLY 6	(n)	(n)	(n)	(n)
RAO-SCOTT	(n)	(n)	(n)	(n)
LITTER C-A/FISHERS	(n)	(n)	(n)	(n)

Test Type: CHRONIC Route: GAVAGE

Species/Strain: RATS/HSD

P08: STATISTICAL ANALYSIS OF PRIMARY TUMORS

Black Cohosh

CAS Number: 84776-26-1

Date Report Requested: 09/06/2021 Time Report Requested: 15:59:32 First Dose M/F: 07/03/12 / 07/02/12

Lab: BAT

			Females	
DOSE	0 mg/kg female	75 mg/kg female	250 mg/kg female	750 mg/kg female
All Organs Hemangiosarcoma				
TUMOR RATES	#	#	#	#
OVERALL (a)	0/50 (0%)	0/50 (0%)	2/50 (4%)	1/50 (2%)
LITTERS (b)	0/25 (0%)	0/25 (0%)	2/25 (8%)	1/25 (4%)
POLY-3 RATE (c)	0/41.83	0/39.18	2/42.83	1/35.85
POLY-3 PERCENT (g)	0%	0%	4.7%	2.8%
TERMINAL (d)	0/28 (0%)	0/24 (0%)	2/29 (7%)	1/20 (5%)
FIRST INCIDENCE			729 (T)	729 (T)
STATISTICAL TESTS				
POLY 3	P=0.293	(e)	P=0.242	P=0.469
POLY 1.5	P=0.316	(e)	P=0.240	P=0.481
POLY 6	P=0.260	(e)	P=0.245	P=0.453
RAO-SCOTT	P=0.350	(e)	P=0.332	P=0.516
LITTER C-A/FISHERS	P=0.349	(e)	P=0.245	P=0.500

Test Type: CHRONIC Route: GAVAGE

Species/Strain: RATS/HSD

P08: STATISTICAL ANALYSIS OF PRIMARY TUMORS

Black Cohosh
CAS Number: 84776-26-1

Date Report Requested: 09/06/2021 Time Report Requested: 15:59:32 First Dose M/F: 07/03/12 / 07/02/12

Lab: BAT

	Females							
DOSE	0 mg/kg female	75 mg/kg female	250 mg/kg female	750 mg/kg female				
All Organs Hemangiosarcoma or Hema	All Organs Hemangiosarcoma or Hemangioma							
TUMOR RATES	#	#	#	#				
OVERALL (a)	0/50 (0%)	0/50 (0%)	2/50 (4%)	1/50 (2%)				
LITTERS (b)	0/25 (0%)	0/25 (0%)	2/25 (8%)	1/25 (4%)				
POLY-3 RATE (c)	0/41.83	0/39.18	2/42.83	1/35.85				
POLY-3 PERCENT (g)	0%	0%	4.7%	2.8%				
TERMINAL (d)	0/28 (0%)	0/24 (0%)	2/29 (7%)	1/20 (5%)				
FIRST INCIDENCE			729 (T)	729 (T)				
STATISTICAL TESTS								
POLY 3	P=0.293	(e)	P=0.242	P=0.469				
POLY 1.5	P=0.316	(e)	P=0.240	P=0.481				
POLY 6	P=0.260	(e)	P=0.245	P=0.453				
RAO-SCOTT	P=0.350	(e)	P=0.332	P=0.516				
LITTER C-A/FISHERS	P=0.349	(e)	P=0.245	P=0.500				

Test Type: CHRONIC Route: GAVAGE

Species/Strain: RATS/HSD

P08: STATISTICAL ANALYSIS OF PRIMARY TUMORS

Black Cohosh

CAS Number: 84776-26-1

Date Report Requested: 09/06/2021 Time Report Requested: 15:59:32 First Dose M/F: 07/03/12 / 07/02/12

Lab: BAT

	Females					
DOSE	0 mg/kg female	75 mg/kg female	250 mg/kg female	750 mg/kg female		
All Organs Leukemia: Lymphocytic, Mo	onocytic, Mononuclear, or	Undifferentiated				
TUMOR RATES	#	#	#	#		
OVERALL (a)	0/50 (0%)	0/50 (0%)	1/50 (2%)	1/50 (2%)		
LITTERS (b)	0/25 (0%)	0/25 (0%)	1/25 (4%)	1/25 (4%)		
POLY-3 RATE (c)	0/41.83	0/39.18	1/43.09	1/36.24		
POLY-3 PERCENT (g)	0%	0%	2.3%	2.8%		
TERMINAL (d)	0/28 (0%)	0/24 (0%)	0/29 (0%)	0/20 (0%)		
FIRST INCIDENCE			658	617		
STATISTICAL TESTS						
POLY 3	(n)	(n)	(n)	(n)		
POLY 1.5	(n)	(n)	(n)	(n)		
POLY 6	(n)	(n)	(n)	(n)		
RAO-SCOTT	(n)	(n)	(n)	(n)		
LITTER C-A/FISHERS	(n)	(n)	(n)	(n)		

Test Type: CHRONIC Route: GAVAGE

Species/Strain: RATS/HSD

P08: STATISTICAL ANALYSIS OF PRIMARY TUMORS

Black Cohosh

CAS Number: 84776-26-1

Date Report Requested: 09/06/2021 Time Report Requested: 15:59:32 First Dose M/F: 07/03/12 / 07/02/12

Lab: BAT

	Females					
DOSE	0 mg/kg female	75 mg/kg female	250 mg/kg female	750 mg/kg female		
All Organs Malignant Schwannoma						
TUMOR RATES	#	#	#	#		
OVERALL (a)	1/50 (2%)	4/50 (8%)	0/50 (0%)	1/50 (2%)		
LITTERS (b)	1/25 (4%)	3/25 (12%)	0/25 (0%)	1/25 (4%)		
POLY-3 RATE (c)	1/41.83	4/39.77	0/42.83	1/35.85		
POLY-3 PERCENT (g)	2.4%	10.1%	0%	2.8%		
TERMINAL (d)	1/28 (4%)	2/24 (8%)	0/29 (0%)	1/20 (5%)		
FIRST INCIDENCE	729 (T)	570		729 (T)		
STATISTICAL TESTS						
POLY 3	P=0.368N	P=0.162	P=0.495N	P=0.726		
POLY 1.5	P=0.354N	P=0.167	P=0.498N	P=0.739		
POLY 6	P=0.382N	P=0.160	P=0.493N	P=0.705		
RAO-SCOTT	P=0.425N	P=0.268	P=0.628N	P=0.737		
LITTER C-A/FISHERS	P=0.426N	P=0.305	P=0.500N	P=0.755		

Test Type: CHRONIC Route: GAVAGE

Species/Strain: RATS/HSD

P08: STATISTICAL ANALYSIS OF PRIMARY TUMORS

Black Cohosh
CAS Number: 84776-26-1

Date Report Requested: 09/06/2021 Time Report Requested: 15:59:32 First Dose M/F: 07/03/12 / 07/02/12

Lab: BAT

Females					
DOSE	0 mg/kg female	75 mg/kg female	250 mg/kg female	750 mg/kg female	
All Organs Mesothelioma: Benign, Mali	gnant, NOS				
TUMOR RATES	#	#	#	#	
OVERALL (a)	0/50 (0%)	0/50 (0%)	0/50 (0%)	0/50 (0%)	
LITTERS (b)	0/25 (0%)	0/25 (0%)	0/25 (0%)	0/25 (0%)	
POLY-3 RATE (c)	0/41.83	0/39.18	0/42.83	0/35.85	
POLY-3 PERCENT (g)	0%	0%	0%	0%	
TERMINAL (d)	0/28 (0%)	0/24 (0%)	0/29 (0%)	0/20 (0%)	
FIRST INCIDENCE					
STATISTICAL TESTS					
POLY 3	(n)	(n)	(n)	(n)	
POLY 1.5	(n)	(n)	(n)	(n)	
POLY 6	(n)	(n)	(n)	(n)	
RAO-SCOTT	(n)	(n)	(n)	(n)	
LITTER C-A/FISHERS	(n)	(n)	(n)	(n)	

Test Type: CHRONIC Route: GAVAGE

Species/Strain: RATS/HSD

P08: STATISTICAL ANALYSIS OF PRIMARY TUMORS

Black Cohosh
CAS Number: 84776-26-1

Date Report Requested: 09/06/2021 Time Report Requested: 15:59:32 First Dose M/F: 07/03/12 / 07/02/12

Lab: BAT

	Females					
DOSE	0 mg/kg female	75 mg/kg female	250 mg/kg female	750 mg/kg female		
All Organs Mesothelioma: Malignant						
TUMOR RATES	#	#	#	#		
OVERALL (a)	0/50 (0%)	0/50 (0%)	0/50 (0%)	0/50 (0%)		
LITTERS (b)	0/25 (0%)	0/25 (0%)	0/25 (0%)	0/25 (0%)		
POLY-3 RATE (c)	0/41.83	0/39.18	0/42.83	0/35.85		
POLY-3 PERCENT (g)	0%	0%	0%	0%		
TERMINAL (d)	0/28 (0%)	0/24 (0%)	0/29 (0%)	0/20 (0%)		
FIRST INCIDENCE						
STATISTICAL TESTS						
POLY 3	(n)	(n)	(n)	(n)		
POLY 1.5	(n)	(n)	(n)	(n)		
POLY 6	(n)	(n)	(n)	(n)		
RAO-SCOTT	(n)	(n)	(n)	(n)		
LITTER C-A/FISHERS	(n)	(n)	(n)	(n)		

Test Type: CHRONIC Route: GAVAGE

Species/Strain: RATS/HSD

P08: STATISTICAL ANALYSIS OF PRIMARY TUMORS

Black Cohosh
CAS Number: 84776-26-1

Date Report Requested: 09/06/2021 Time Report Requested: 15:59:32 First Dose M/F: 07/03/12 / 07/02/12

Lab: BAT

Females					
DOSE	0 mg/kg female	75 mg/kg female	250 mg/kg female	750 mg/kg female	
All Organs Benign Tumors					
TUMOR RATES	#	#	#	#	
OVERALL (a)	44/50 (88%)	46/50 (92%)	44/50 (88%)	31/50 (62%)	
LITTERS (b)	24/25 (96%)	25/25 (100%)	25/25 (100%)	22/25 (88%)	
POLY-3 RATE (c)	44/49.73	46/49.48	44/49.58	31/41.70	
POLY-3 PERCENT (g)	88.5%	93%	88.8%	74.4%	
TERMINAL (d)	23/28 (82%)	21/24 (88%)	24/29 (83%)	15/20 (75%)	
FIRST INCIDENCE	499	302	360	548	
STATISTICAL TESTS					
POLY 3	P=0.008N**	P=0.333	P=0.609	P=0.055N	
POLY 1.5	P<0.001N**	P=0.347	P=0.613	P=0.017N*	
POLY 6	P=0.057N	P=0.324	P=0.606	P=0.169N	
RAO-SCOTT	P=0.014N*	P=0.363	P=0.617	P=0.085N	
LITTER C-A/FISHERS	P=0.053N	P=0.500	P=0.500	P=0.305N	

Test Type: CHRONIC Route: GAVAGE

Species/Strain: RATS/HSD

P08: STATISTICAL ANALYSIS OF PRIMARY TUMORS

Black Cohosh

CAS Number: 84776-26-1

Date Report Requested: 09/06/2021 Time Report Requested: 15:59:32 First Dose M/F: 07/03/12 / 07/02/12

Lab: BAT

	Females					
DOSE	0 mg/kg female	75 mg/kg female	250 mg/kg female	750 mg/kg female		
All Organs Malignant Tumors						
TUMOR RATES	#	#	#	#		
OVERALL (a)	7/50 (14%)	13/50 (26%)	13/50 (26%)	14/50 (28%)		
LITTERS (b)	7/25 (28%)	8/25 (32%)	13/25 (52%)	11/25 (44%)		
POLY-3 RATE (c)	7/42.87	13/41.88	13/44.85	14/39.00		
POLY-3 PERCENT (g)	16.3%	31%	29%	35.9%		
TERMINAL (d)	3/28 (11%)	3/24 (13%)	7/29 (24%)	4/20 (20%)		
FIRST INCIDENCE	578	570	538	578		
STATISTICAL TESTS						
POLY 3	P=0.079	P=0.087	P=0.121	P=0.035*		
POLY 1.5	P=0.099	P=0.089	P=0.113	P=0.044*		
POLY 6	P=0.061	P=0.092	P=0.131	P=0.027*		
RAO-SCOTT	P=0.111	P=0.125	P=0.163	P=0.062		
LITTER C-A/FISHERS	P=0.168	P=0.500	P=0.074	P=0.189		

Test Type: CHRONIC Route: GAVAGE

Species/Strain: RATS/HSD

P08: STATISTICAL ANALYSIS OF PRIMARY TUMORS

Black Cohosh

CAS Number: 84776-26-1

Date Report Requested: 09/06/2021 Time Report Requested: 15:59:32 First Dose M/F: 07/03/12 / 07/02/12

Lab: BAT

	Females					
DOSE	0 mg/kg female	75 mg/kg female	250 mg/kg female	750 mg/kg female		
All Organs Malignant and Benign Tumors						
TUMOR RATES	#	#	#	#		
OVERALL (a)	46/50 (92%)	47/50 (94%)	45/50 (90%)	32/50 (64%)		
LITTERS (b)	24/25 (96%)	25/25 (100%)	25/25 (100%)	22/25 (88%)		
POLY-3 RATE (c)	46/50.00	47/50.00	45/49.58	32/42.02		
POLY-3 PERCENT (g)	92%	94%	90.8%	76.2%		
TERMINAL (d)	24/28 (86%)	21/24 (88%)	25/29 (86%)	15/20 (75%)		
FIRST INCIDENCE	499	302	360	548		
STATISTICAL TESTS						
POLY 3	P=0.003N**	P=0.500	P=0.555N	P=0.023N*		
POLY 1.5	P<0.001N**	P=0.500	P=0.531N	P=0.005N**		
POLY 6	P=0.034N*	P=0.500	P=0.587N	P=0.099N		
RAO-SCOTT	P=0.008N**	P=0.529	P=0.575N	P=0.052N		
LITTER C-A/FISHERS	P=0.053N	P=0.500	P=0.500	P=0.305N		

Test Type: CHRONIC Route: GAVAGE

Species/Strain: RATS/HSD

P08: STATISTICAL ANALYSIS OF PRIMARY TUMORS

Black Cohosh
CAS Number: 84776-26-1

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Lab: BAT

LEGEND

	_ \	N I	[4	! l _ /		f animals examined at si	4 -
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- (b) Number of litters with tumor-bearing animals/number of litters examined at site
- (c) Number of tumor-bearing animals/Poly-3 number
- (d) Observed incidence at terminal kill.
- (e) Value of statistic cannot be computed.
- (f) Beneath the control incidence are the P-values associated with the trend test. Beneath the dosed group incidence are the P-values corresponding to
- pairwise comparisons between the controls and that dosed group.
- (g) Poly-3 adjusted lifetime tumor incidence.
- (n) No statistics are calculated if all dose groups have fewer than two tumors.
- (I) Interim sacrifice
- (T) Terminal sacrifice
- # Tumor rates based on numbers of animals necropsied.
- To the right of any statistical result, indicates significance at (P<=0.05).
- ** To the right of any statistical result, indicates significance at (P<=0.01).
- N Indicates a negative trend for all tests

The Rao-Scott statistic performs the Poly-3 test with an adjustment for within-litter correlation.

The Litter C-A/Fishers statistic compares directly the litter incidence rates.

*** END OF REPORT ***