

Pathology - Intergroup Comparison of Pathology Observations

For Study: 02G16015
Title: Subchronic (13 week) brake dust inhalation toxicology study (nose-only) with lifelong follow-up in the rat
Requested By: Dirk Schaudien
Job Number: 48778
Animal Reference: Animal Name
Animals Excluded: 1000, 1001, 1002, 1003, 1010, 1011, 1012, 1013, 1020, 1021, 1022, 1023, 1030, 1031, 1032, 1033, 1060, 1061, 1062, 1063, 1070, 1071, 1072, 1073, 1080, 1081, 1082, 1083, 1084, 1085, 1086, 1087, 1088, 1089, 1090, 1091, 1092, 1093, 1094, 1095, 1096, 1097, 1098, 2000, 2001, 2002, 2003, 2010, 2011, 2012, + others.

Day Numbers: All
Groups: All
Observation Type: Histo - Neoplastic and Non-Neoplastic
Observation Summary: Incidence
Report Format: Group within Sex
Tissues: All
Rationalisation: None
Removal Reasons: All
Completed Animals Only: No
Animals with Observations Only: No
Major Pathological Findings Only: No
Split Observations by: GRADE
Split Table by: Sex
Use Alternative Descriptions: No
Repeat First Group on Each Page: No
Style: Landscape - 12 Columns
Include: NVL Tissues; NE Tissues; Neoplastic - QUALIFIERS; TUMOUR TYPE; ORIGIN; CLASSIFICATION; Non-neoplastic - QUALIFIERS; SIZE

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02G16015 - Subchronic (13 week) brake dust inhalation toxicology study
(nose-only) with lifelong follow-up in the rat, 3 months post exposure

Removal Reason: ALL	Male					
	Clean air control	brake dust low	Brake dust mid	Brake dust high	Titanium-dioxide	Chrysotile low
Number of Animals:	4	3	4	4	4	4
Number of Completed Animals:	0	0	0	0	0	0
larynx						
Examined	4	3	4	4	4	4
No Visible Lesions	1	1	3	2	3	3
Dilatation, Submucosal Glands	1	1	1	1	0	1
.... very slight	0	0	1	0	0	1
.... slight	1	1	0	1	0	0
Infiltration, Mononuclear Cell	2	1	1	1	1	0
.... very slight	1	1	1	1	1	0
.... slight	1	0	0	0	0	0
lung						
Examined	4	3	4	4	4	4
Accumulation, Fibre-Laden Macrophages	0 ¹	0	0	0	0	0
.... slight	0 ¹	0	0	0	0	0
Accumulation, Particle-Laden Macrophages	0 ¹	1	3	4 f ⁺	4 f ⁺	4 f ⁺
.... very slight	0 ¹	1	3	4 f ⁺	4 f ⁺	4 f ⁺
Fibrosis	0 ¹	0	0	0	0	1
.... very slight	0	0	0	0	0	1
.... slight	0 ¹	0	0	0	0	0
Giant Cells, Syncytial	0 ¹	0	0	0	0	0

+ [Footnote is displayed in the Comments and Markers page]

1 [ccc - Group Factor Chi-Squared & Fisher's Exact: Test: Chi-Squared p < 0.001]

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Number of Animals:	4	3	4	4	4	4
Number of Completed Animals:	0	0	0	0	0	0
lung (Continued...)						
.... very slight	0 ¹	0	0	0	0	0
.... slight	0 ¹	0	0	0	0	0
Hyperplasia, Bronchiolo-Alveolar	0 ¹	0	1	2	0	4 f ⁺
.... very slight	0 ⁺	0	1	2	0	4 f ⁺
.... slight	0 ¹	0	0	0	0	0
Hyperplasia, Bronchiolo-Alveolar; alveolar type	0	0	0	0	0	0
.... slight	0	0	0	0	0	0
Hyperplasia, Neuroendocrine Cell	0	1	0	0	0	0
.... slight	0	1	0	0	0	0
Infiltration, Inflammatory Cell	0 ¹	0	0	1	1	3
.... very slight	0 ¹	0	0	1	1	3
.... slight	0 ⁺	0	0	0	0	0
Infiltration, Mononuclear Cell	1	1	0	2	0	0
.... very slight	1	1	0	2	0	0
Macrophage Aggregation, Alveolar	1	1	1	0	0	0
.... very slight	1	1	1	0	0	0
Microgranuloma	0 ¹	0	0	0	0	0
.... very slight	0	0	0	0	0	0

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	Clean air control	brake dust low	Brake dust mid	Brake dust high	Titanium-dioxide	Chrysotile low
Number of Animals:	4	3	4	4	4	4
Number of Completed Animals:	0	0	0	0	0	0
lung (Continued...)						
.... slight	0 ¹	0	0	0	0	0
Wagner Grade 2	0 ⁺	1	3	4 ^{f+}	4 ^{f+}	2
Wagner Grade 3	0 ^{c+}	0	0	0	0	2
Wagner Grade 4	0 ¹	0	0	0	0	0
Wagner Grade 1	4 ¹	2	1	0 ^{f+}	0 ^{f+}	0 ^{f+}
Accumulation, Particle-Laden Macrophages, Balt	0 ¹	2	4 ^{f+}	3	4 ^{f+}	2
.... very slight	0 ¹	2	4 ^{f+}	3	4 ^{f+}	2
Accumulation, Fibre-Laden Macrophages, Balt	0 ⁺	0	0	0	0	0
.... very slight	0 ⁺	0	0	0	0	0
lung associated lymph nodes (ln)						
Examined	4	3	4	4	4	4
No Visible Lesions	4	3	1	0	0	4
Accumulation, Fibre-Laden Macrophages	0 ¹	0	0	0	0	0
.... very slight	0 ⁺	0	0	0	0	0
.... slight	0	0	0	0	0	0
Accumulation, Particle-Laden Macrophages	0 ¹	0	3	4 ^{f+}	4 ^{f+}	0
.... very slight	0 ¹	0	3	4 ^{f+}	3	0
.... slight	0	0	0	0	1	0

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Removal Reason: ALL	Male					
	Clean air control	brake dust low	Brake dust mid	Brake dust high	Titanium-dioxide	Chrysotile low
Number of Animals:	4	3	4	4	4	4
Number of Completed Animals:	0	0	0	0	0	0
lung associated lymph nodes (ln) (Continued...)						
Hyperplasia, Lymphoid	0	0	0	0	2	0
.... slight	0	0	0	0	2	0
nasal cavity						
Examined	4	3	4	4	4	4
No Visible Lesions	0	0	2	0	2	2
Corpora Amylacea	0	0	0	0	0	0
.... very slight	0	0	0	0	0	0
Droplets, Hyaline	2	3	2	4	2	1
.... very slight	2	0	1	2	2	1
.... slight	1	2	1	2	0	0
.... moderate	0	1	0	0	0	0
Hyperplasia, Mucous Cell	0	1	0	1	0	1
.... very slight	0	1	0	1	0	1
Infiltration, Inflammatory Cell	1	0	0	1	0	0
.... very slight	1	0	0	0	0	0
.... slight	0	0	0	1	0	0
Hyperplasia, Nalt	1	0	1	1	0	0
.... slight	1	0	1	1	0	0

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Removal Reason: ALL	Male					
	Clean air control	brake dust low	Brake dust mid	Brake dust high	Titanium-dioxide	Chrysotile low
Number of Animals:	4	3	4	4	4	4
Number of Completed Animals:	0	0	0	0	0	0
nasopharynx						
Examined	4	3	4	4	4	4
No Visible Lesions	4	3	4	4	4	4
skin/subcutaneous tissue						
Examined	0	0	0	0	1	1
Tumor, Hair Follicle, [B]; benign	.	.	.	.	0	1
Abscess(Es)	.	.	.	.	1	0
.... severe	.	.	.	.	1	0
trachea						
Examined	4	3	4	4	4	4
No Visible Lesions	3	3	3	3	4	4
Infiltration, Mononuclear Cell	1	0	1	1	0	0
.... very slight	0	0	1	1	0	0
.... slight	1	0	0	0	0	0
thymus						
Examined	0	0	0	0	0	1
Thymoma, [M]; malignant	1

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Removal Reason: ALL	Male		
	Chrysotile high	Crocido-lite	Amosite
Number of Animals:	3	4	4
Number of Completed Animals:	0	0	0
larynx			
Examined	3	4	4
No Visible Lesions	1	3	3
Dilatation, Submucosal Glands	0	1	0
.... very slight	0	1	0
.... slight	0	0	0
Infiltration, Mononuclear Cell	2	0	1
.... very slight	2	0	1
.... slight	0	0	0
lung			
Examined	3	4	4
Accumulation, Fibre-Laden Macrophages	0	4 f ¹	4 f ¹
.... slight	0	4 f ¹	4 f ¹
Accumulation, Particle-Laden Macrophages	3 f ¹	0	0
.... very slight	3 f ¹	0	0
Fibrosis	1	4 f ¹	4 f ¹
.... very slight	1	1	1
.... slight	0	3	4 f ¹
Giant Cells, Syncytial	0	4 f ¹	4 f ¹

1 [f - Test: Fisher's Exact 2 Sided p < 0.05]

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Removal Reason: ALL	Male		
	Chrysotile high	Crocido-lite	Amosite
Number of Animals:	3	4	4
Number of Completed Animals:	0	0	0
lung (Continued...)			
.... very slight	0	4 f ¹	0
.... slight	0	0	4 f ¹
Hyperplasia, Bronchiolo-Alveolar	2	4 f ¹	4 f ¹
.... very slight	2	1	0
.... slight	0	3	4 f ¹
Hyperplasia, Bronchiolo-Alveolar; alveolar type	0	1	0
.... slight	0	1	0
Hyperplasia, Neuroendocrine Cell	0	0	0
.... slight	0	0	0
Infiltration, Inflammatory Cell	2	4 f ¹	4 f ¹
.... very slight	2	4 f ¹	4 f ¹
.... slight	0	3	2
Infiltration, Mononuclear Cell	0	1	0
.... very slight	0	1	0
Macrophage Aggregation, Alveolar	0	0	0
.... very slight	0	0	0
Microgranuloma	1	4 f ¹	4 f ¹
.... very slight	1	2	0

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Removal Reason: ALL	Male		
	Chrysotile high	Crocidolite	Amosite
Number of Animals:	3	4	4
Number of Completed Animals:	0	0	0
lung (Continued...)			
.... slight	0	2	4 f ¹
Wagner Grade 2	1	0	0
Wagner Grade 3	2	0	0
Wagner Grade 4	0	4 f ¹	4 f ¹
Wagner Grade 1	0 f ¹	0 f ¹	0 f ¹
Accumulation, Particle-Laden Macrophages, Balt	3 f ¹	0	0
.... very slight	3 f ¹	0	0
Accumulation, Fibre-Laden Macrophages, Balt	0	2	3
.... very slight	0	2	3
lung associated lymph nodes (ln)			
Examined	3	4	4
No Visible Lesions	0	0	0
Accumulation, Fibre-Laden Macrophages	0	4 f ¹	4 f ¹
.... very slight	0	2	3
.... slight	0	2	1
Accumulation, Particle-Laden Macrophages	3 f ¹	0	0
.... very slight	3 f ¹	0	0
.... slight	0	0	0

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Removal Reason: ALL	Male		
	Chrysotile high	Crocido-lite	Amosite
Number of Animals:	3	4	4
Number of Completed Animals:	0	0	0
lung associated lymph nodes (ln) (Continued...)			
Hyperplasia, Lymphoid	0	1	1
.... slight	0	1	1
nasal cavity			
Examined	3	4	4
No Visible Lesions	2	0	0
Corpora Amylacea	0	0	1
.... very slight	0	0	1
Droplets, Hyaline	1	3	2
.... very slight	1	2	1
.... slight	0	1	1
.... moderate	0	1	1
Hyperplasia, Mucous Cell	0	0	1
.... very slight	0	0	1
Infiltration, Inflammatory Cell	0	1	2
.... very slight	0	1	2
.... slight	0	0	0
Hyperplasia, Nalt	0	0	2
.... slight	0	0	2

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	Chrysotile high	Crocido-lite	Amosite
Number of Animals:	3	4	4
Number of Completed Animals:	0	0	0
nasopharynx			
Examined	3	4	4
No Visible Lesions	3	4	4
skin/subcutaneous tissue			
Examined	0	0	0
Tumor, Hair Follicle, [B]; benign	.	.	.
Abscess(Es)	.	.	.
.... severe	.	.	.
trachea			
Examined	3	4	4
No Visible Lesions	3	3	3
Infiltration, Mononuclear Cell	0	1	1
.... very slight	0	1	1
.... slight	0	0	0
thymus			
Examined	0	0	0
Thymoma, [M]; malignant	.	.	.

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Comments and Markers

Removal Reason	Sex	Group	Measurement	Marker
ALL	Male	1	lung : Accumulation, Fibre-Laden Macrophages <i>Comment:</i> Group Factor Chi-Squared & Fisher's Exact: Test: Chi-Squared p < 0.001	ccc
ALL	Male	1	lung : Accumulation, Fibre-Laden Macrophages, slight <i>Comment:</i> Group Factor Chi-Squared & Fisher's Exact: Test: Chi-Squared p < 0.001	ccc
ALL	Male	1	lung : Accumulation, Particle-Laden Macrophages <i>Comment:</i> Group Factor Chi-Squared & Fisher's Exact: Test: Chi-Squared p < 0.001	ccc
ALL	Male	4	lung : Accumulation, Particle-Laden Macrophages <i>Comment:</i> Test: Fisher's Exact 2 Sided p < 0.05	f
ALL	Male	5	lung : Accumulation, Particle-Laden Macrophages <i>Comment:</i> Test: Fisher's Exact 2 Sided p < 0.05	f
ALL	Male	6	lung : Accumulation, Particle-Laden Macrophages <i>Comment:</i> Test: Fisher's Exact 2 Sided p < 0.05	f
ALL	Male	1	lung : Accumulation, Particle-Laden Macrophages, very slight <i>Comment:</i> Group Factor Chi-Squared & Fisher's Exact: Test: Chi-Squared p < 0.001	ccc
ALL	Male	4	lung : Accumulation, Particle-Laden Macrophages, very slight <i>Comment:</i> Test: Fisher's Exact 2 Sided p < 0.05	f
ALL	Male	5	lung : Accumulation, Particle-Laden Macrophages, very slight <i>Comment:</i> Test: Fisher's Exact 2 Sided p < 0.05	f
ALL	Male	6	lung : Accumulation, Particle-Laden Macrophages, very slight <i>Comment:</i> Test: Fisher's Exact 2 Sided p < 0.05	f
ALL	Male	1	lung : Fibrosis <i>Comment:</i> Group Factor Chi-Squared & Fisher's Exact: Test: Chi-Squared p < 0.001	ccc

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Removal Reason	Sex	Group	Measurement	Marker
ALL	Male	1	lung : Fibrosis, slight <i>Comment:</i> Group Factor Chi-Squared & Fisher's Exact: Test: Chi-Squared p < 0.001	ccc
ALL	Male	1	lung : Giant Cells, Syncytial <i>Comment:</i> Group Factor Chi-Squared & Fisher's Exact: Test: Chi-Squared p < 0.001	ccc
ALL	Male	1	lung : Giant Cells, Syncytial, very slight <i>Comment:</i> Group Factor Chi-Squared & Fisher's Exact: Test: Chi-Squared p < 0.001	ccc
ALL	Male	1	lung : Giant Cells, Syncytial, slight <i>Comment:</i> Group Factor Chi-Squared & Fisher's Exact: Test: Chi-Squared p < 0.001	ccc
ALL	Male	1	lung : Hyperplasia, Bronchiolo-Alveolar <i>Comment:</i> Group Factor Chi-Squared & Fisher's Exact: Test: Chi-Squared p < 0.001	ccc
ALL	Male	6	lung : Hyperplasia, Bronchiolo-Alveolar <i>Comment:</i> Test: Fisher's Exact 2 Sided p < 0.05	f
ALL	Male	1	lung : Hyperplasia, Bronchiolo-Alveolar, very slight <i>Comment:</i> Group Factor Chi-Squared & Fisher's Exact: Test: Chi-Squared p < 0.01	cc
ALL	Male	6	lung : Hyperplasia, Bronchiolo-Alveolar, very slight <i>Comment:</i> Test: Fisher's Exact 2 Sided p < 0.05	f
ALL	Male	1	lung : Hyperplasia, Bronchiolo-Alveolar, slight <i>Comment:</i> Group Factor Chi-Squared & Fisher's Exact: Test: Chi-Squared p < 0.001	ccc
ALL	Male	1	lung : Infiltration, Inflammatory Cell <i>Comment:</i> Group Factor Chi-Squared & Fisher's Exact: Test: Chi-Squared p < 0.001	ccc
ALL	Male	1	lung : Infiltration, Inflammatory Cell, very slight <i>Comment:</i> Group Factor Chi-Squared & Fisher's Exact: Test: Chi-Squared p < 0.001	ccc

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Removal Reason	Sex	Group	Measurement	Marker
ALL	Male	1	lung : Infiltration, Inflammatory Cell, slight <i>Comment:</i> Group Factor Chi-Squared & Fisher's Exact: Test: Chi-Squared p < 0.01	cc
ALL	Male	1	lung : Microgranuloma <i>Comment:</i> Group Factor Chi-Squared & Fisher's Exact: Test: Chi-Squared p < 0.001	ccc
ALL	Male	1	lung : Microgranuloma, slight <i>Comment:</i> Group Factor Chi-Squared & Fisher's Exact: Test: Chi-Squared p < 0.001	ccc
ALL	Male	1	lung : Wagner Grade 2 <i>Comment:</i> Group Factor Chi-Squared & Fisher's Exact: Test: Chi-Squared p < 0.01	cc
ALL	Male	4	lung : Wagner Grade 2 <i>Comment:</i> Test: Fisher's Exact 2 Sided p < 0.05	f
ALL	Male	5	lung : Wagner Grade 2 <i>Comment:</i> Test: Fisher's Exact 2 Sided p < 0.05	f
ALL	Male	1	lung : Wagner Grade 3 <i>Comment:</i> Group Factor Chi-Squared & Fisher's Exact: Test: Chi-Squared p < 0.05	c
ALL	Male	1	lung : Wagner Grade 4 <i>Comment:</i> Group Factor Chi-Squared & Fisher's Exact: Test: Chi-Squared p < 0.001	ccc
ALL	Male	1	lung : Wagner Grade 1 <i>Comment:</i> Group Factor Chi-Squared & Fisher's Exact: Test: Chi-Squared p < 0.001	ccc
ALL	Male	4	lung : Wagner Grade 1 <i>Comment:</i> Test: Fisher's Exact 2 Sided p < 0.05	f
ALL	Male	5	lung : Wagner Grade 1 <i>Comment:</i> Test: Fisher's Exact 2 Sided p < 0.05	f

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Comments and Markers

Removal Reason	Sex	Group	Measurement	Marker
ALL	Male	6	lung : Wagner Grade 1	f
			<i>Comment:</i> Test: Fisher's Exact 2 Sided p < 0.05	
ALL	Male	1	lung : Accumulation, Particle-Laden Macrophages, Balt	ccc
			<i>Comment:</i> Group Factor Chi-Squared & Fisher's Exact: Test: Chi-Squared p < 0.001	
ALL	Male	3	lung : Accumulation, Particle-Laden Macrophages, Balt	f
			<i>Comment:</i> Test: Fisher's Exact 2 Sided p < 0.05	
ALL	Male	5	lung : Accumulation, Particle-Laden Macrophages, Balt	f
			<i>Comment:</i> Test: Fisher's Exact 2 Sided p < 0.05	
ALL	Male	1	lung : Accumulation, Particle-Laden Macrophages, Balt, very slight	ccc
			<i>Comment:</i> Group Factor Chi-Squared & Fisher's Exact: Test: Chi-Squared p < 0.001	
ALL	Male	3	lung : Accumulation, Particle-Laden Macrophages, Balt, very slight	f
			<i>Comment:</i> Test: Fisher's Exact 2 Sided p < 0.05	
ALL	Male	5	lung : Accumulation, Particle-Laden Macrophages, Balt, very slight	f
			<i>Comment:</i> Test: Fisher's Exact 2 Sided p < 0.05	
ALL	Male	1	lung : Accumulation, Fibre-Laden Macrophages, Balt	cc
			<i>Comment:</i> Group Factor Chi-Squared & Fisher's Exact: Test: Chi-Squared p < 0.01	
ALL	Male	1	lung : Accumulation, Fibre-Laden Macrophages, Balt, very slight	cc
			<i>Comment:</i> Group Factor Chi-Squared & Fisher's Exact: Test: Chi-Squared p < 0.01	
ALL	Male	1	lung associated lymph nodes (laln) : Accumulation, Fibre-Laden Macrophages	ccc
			<i>Comment:</i> Group Factor Chi-Squared & Fisher's Exact: Test: Chi-Squared p < 0.001	
ALL	Male	1	lung associated lymph nodes (laln) : Accumulation, Fibre-Laden Macrophages, very slight	cc
			<i>Comment:</i> Group Factor Chi-Squared & Fisher's Exact: Test: Chi-Squared p < 0.01	

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Comments and Markers

Removal Reason	Sex	Group	Measurement	Marker
ALL	Male	1	lung associated lymph nodes (laln) : Accumulation, Particle-Laden Macrophages <i>Comment:</i> Group Factor Chi-Squared & Fisher's Exact: Test: Chi-Squared p < 0.001	ccc
ALL	Male	4	lung associated lymph nodes (laln) : Accumulation, Particle-Laden Macrophages <i>Comment:</i> Test: Fisher's Exact 2 Sided p < 0.05	f
ALL	Male	5	lung associated lymph nodes (laln) : Accumulation, Particle-Laden Macrophages <i>Comment:</i> Test: Fisher's Exact 2 Sided p < 0.05	f
ALL	Male	1	lung associated lymph nodes (laln) : Accumulation, Particle-Laden Macrophages, very slight <i>Comment:</i> Group Factor Chi-Squared & Fisher's Exact: Test: Chi-Squared p < 0.001	ccc
ALL	Male	4	lung associated lymph nodes (laln) : Accumulation, Particle-Laden Macrophages, very slight <i>Comment:</i> Test: Fisher's Exact 2 Sided p < 0.05	f
ALL	Male	8	lung : Accumulation, Fibre-Laden Macrophages <i>Comment:</i> Test: Fisher's Exact 2 Sided p < 0.05	f
ALL	Male	9	lung : Accumulation, Fibre-Laden Macrophages <i>Comment:</i> Test: Fisher's Exact 2 Sided p < 0.05	f
ALL	Male	8	lung : Accumulation, Fibre-Laden Macrophages, slight <i>Comment:</i> Test: Fisher's Exact 2 Sided p < 0.05	f
ALL	Male	9	lung : Accumulation, Fibre-Laden Macrophages, slight <i>Comment:</i> Test: Fisher's Exact 2 Sided p < 0.05	f
ALL	Male	7	lung : Accumulation, Particle-Laden Macrophages <i>Comment:</i> Test: Fisher's Exact 2 Sided p < 0.05	f
ALL	Male	7	lung : Accumulation, Particle-Laden Macrophages, very slight <i>Comment:</i> Test: Fisher's Exact 2 Sided p < 0.05	f

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Comments and Markers

Removal Reason	Sex	Group	Measurement	Marker
ALL	Male	8	lung : Fibrosis	f
			<i>Comment:</i> Test: Fisher's Exact 2 Sided p < 0.05	
ALL	Male	9	lung : Fibrosis	f
			<i>Comment:</i> Test: Fisher's Exact 2 Sided p < 0.05	
ALL	Male	9	lung : Fibrosis, slight	f
			<i>Comment:</i> Test: Fisher's Exact 2 Sided p < 0.05	
ALL	Male	8	lung : Giant Cells, Syncytial	f
			<i>Comment:</i> Test: Fisher's Exact 2 Sided p < 0.05	
ALL	Male	9	lung : Giant Cells, Syncytial	f
			<i>Comment:</i> Test: Fisher's Exact 2 Sided p < 0.05	
ALL	Male	8	lung : Giant Cells, Syncytial, very slight	f
			<i>Comment:</i> Test: Fisher's Exact 2 Sided p < 0.05	
ALL	Male	9	lung : Giant Cells, Syncytial, slight	f
			<i>Comment:</i> Test: Fisher's Exact 2 Sided p < 0.05	
ALL	Male	8	lung : Hyperplasia, Bronchiolo-Alveolar	f
			<i>Comment:</i> Test: Fisher's Exact 2 Sided p < 0.05	
ALL	Male	9	lung : Hyperplasia, Bronchiolo-Alveolar	f
			<i>Comment:</i> Test: Fisher's Exact 2 Sided p < 0.05	
ALL	Male	9	lung : Hyperplasia, Bronchiolo-Alveolar, slight	f
			<i>Comment:</i> Test: Fisher's Exact 2 Sided p < 0.05	
ALL	Male	8	lung : Infiltration, Inflammatory Cell	f
			<i>Comment:</i> Test: Fisher's Exact 2 Sided p < 0.05	

Pathology - Intergroup Comparison of Pathology Observations

02G16015 - Subchronic (13 week) brake dust inhalation toxicology study
(nose-only) with lifelong follow-up in the rat, 3 months post exposure

Comments and Markers

Removal Reason	Sex	Group	Measurement	Marker
ALL	Male	9	lung : Infiltration, Inflammatory Cell	f
			<i>Comment:</i> Test: Fisher's Exact 2 Sided p < 0.05	
ALL	Male	8	lung : Infiltration, Inflammatory Cell, very slight	f
			<i>Comment:</i> Test: Fisher's Exact 2 Sided p < 0.05	
ALL	Male	9	lung : Infiltration, Inflammatory Cell, very slight	f
			<i>Comment:</i> Test: Fisher's Exact 2 Sided p < 0.05	
ALL	Male	8	lung : Microgranuloma	f
			<i>Comment:</i> Test: Fisher's Exact 2 Sided p < 0.05	
ALL	Male	9	lung : Microgranuloma	f
			<i>Comment:</i> Test: Fisher's Exact 2 Sided p < 0.05	
ALL	Male	9	lung : Microgranuloma, slight	f
			<i>Comment:</i> Test: Fisher's Exact 2 Sided p < 0.05	
ALL	Male	8	lung : Wagner Grade 4	f
			<i>Comment:</i> Test: Fisher's Exact 2 Sided p < 0.05	
ALL	Male	9	lung : Wagner Grade 4	f
			<i>Comment:</i> Test: Fisher's Exact 2 Sided p < 0.05	
ALL	Male	7	lung : Wagner Grade 1	f
			<i>Comment:</i> Test: Fisher's Exact 2 Sided p < 0.05	
ALL	Male	8	lung : Wagner Grade 1	f
			<i>Comment:</i> Test: Fisher's Exact 2 Sided p < 0.05	
ALL	Male	9	lung : Wagner Grade 1	f
			<i>Comment:</i> Test: Fisher's Exact 2 Sided p < 0.05	

Pathology - Intergroup Comparison of Pathology Observations

02G16015 - Subchronic (13 week) brake dust inhalation toxicology study
(nose-only) with lifelong follow-up in the rat, 3 months post exposure

Comments and Markers

Removal Reason	Sex	Group	Measurement	Marker
ALL	Male	7	lung : Accumulation, Particle-Laden Macrophages, Balt	f
			<i>Comment:</i> Test: Fisher's Exact 2 Sided p < 0.05	
ALL	Male	7	lung : Accumulation, Particle-Laden Macrophages, Balt, very slight	f
			<i>Comment:</i> Test: Fisher's Exact 2 Sided p < 0.05	
ALL	Male	8	lung associated lymph nodes (ln) : Accumulation, Fibre-Laden Macrophages	f
			<i>Comment:</i> Test: Fisher's Exact 2 Sided p < 0.05	
ALL	Male	9	lung associated lymph nodes (ln) : Accumulation, Fibre-Laden Macrophages	f
			<i>Comment:</i> Test: Fisher's Exact 2 Sided p < 0.05	
ALL	Male	7	lung associated lymph nodes (ln) : Accumulation, Particle-Laden Macrophages	f
			<i>Comment:</i> Test: Fisher's Exact 2 Sided p < 0.05	
ALL	Male	7	lung associated lymph nodes (ln) : Accumulation, Particle-Laden Macrophages, very slight	f
			<i>Comment:</i> Test: Fisher's Exact 2 Sided p < 0.05	

Pathology - Intergroup Comparison of Pathology Observations

02G16015 - Subchronic (13 week) brake dust inhalation toxicology study
(nose-only) with lifelong follow-up in the rat, 3 months post exposure

Key Page

Measurement/Statistics

<u>Measurement</u>	<u>Descriptive</u>	<u>Comparative</u>	<u>Arithmetic/Adjusted</u>	<u>Transformation</u>
Pathology Observation	Count Positives	Chi-Squared & Fisher's Exact		

Group Information

<u>Short Name</u>	<u>Long Name</u>	<u>Report Headings</u>	
1	Clean air	Clean air	control
2	brake dust low	brake dust	low
3	brake dust mid	Brake dust	mid
4	brake dust high	Brake dust	high
5	Particel Control	Titanium-	dioxide
6	Chrysotile low	Chrysotile	low
7	Chrysotile high	Chrysotile	high
8	Crocidolite	Crocido-	lite
9	Amosite	Amosite	

Removal Reason Grouping

<u>Grouping Name</u>	<u>Abbreviation</u>	<u>Removal Reasons</u>
Killed - Terminal Kill	TeKi	Killed - Terminal Kill
Killed - Moribund	US	Killed - Moribund
Found Dead	FD	Found Dead

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