

Lung response to multi-walled carbon nanotubes (MWCNT) exposure in rats

Data Dictionary

Field Name	Field contents
Sample ID	Identification of the rat or sample used in the study
Exposure	Agent to which the rats were exposed (air or MWCNT) and the MWCNT dose employed
Body weight	Body weights of rats in grams
AMs counted	Number of bronchoalveolar lavage (BAL) alveolar macrophages (AMs) counted per 200 total cells from a cytopsin slide
PMNs counted	Number of BAL polymorphonuclear leukocytes (PMNs) counted per 200 total cells from a cytopsin slide
%AMs	% of BAL AMs counted from a cytopsin slide
%PMNs	% of BAL PMNs counted from a cytopsin slide
Total cell count	Total number of cells in the BAL determined by a coulter counter
Total AM	Number of AMs in the BAL calculated from cytopsin and coulter counter
Total PMN	Number of PMNs in the BAL calculated from cytopsin and coulter counter
LDH	Lactate dehydrogenase activity in the BAL fluid (U/L BAL fluid)
Total counts/15 min/BAL Cells	Chemiluminescence counts/15 min/one million BAL cells
Total counts/15 min/AMs	Chemiluminescence counts/15 min/one million AMs
Total PMA	Chemiluminescence counts/15 min/total number of BAL cells
Total Zymosan-	Chemiluminescence counts/15 min/total number of alveolar macrophages
RBC	Number of erythrocytes (million/ μ l blood)
HGB	Hemoglobin concentration (g/dL blood)
HCT	Hematocrit value: erythrocyte ratio of total blood volume (%)
MCV	Mean erythrocyte volume in sample (fL)
MCH	Mean hemoglobin volume per red blood cell (RBC) count (pg)
MCHC	Mean hemoglobin concentration of erythrocytes (g/dL blood)
RDW-SD	The degree of variation in size of the erythrocyte population (fL)
RDW-CV	The degree of variation in size of the erythrocyte population (%)
RET	Reticulocyte number (1000/ μ l blood)
PLT	Total number of platelets (1000/ μ l blood)
PDW	Platelet distribution width; the degree of variation in size of the platelet population (fL)
MPV	Mean platelet volume (fL)
P-LCR	Platelet large cell ratio (%)
PCT	Plateletcrit value (%)
WBC	Total number of leukocytes (1000/ μ L blood)
NEUT	Neutrophil count (1000/ μ L blood)
LYMPH	Lymphocyte count (1000/ μ L blood)

MONO	Monocyte count (1000/uL blood)
EO	Eosinophil count (1000/uL blood)
BASO	Basophil count (1000/uL blood)
IL-1 β (8P)	Picogram IL-1 β protein/ml BAL fluid (detected by an 8-panel assay)
IL-10(8P)	Picogram IL-10 protein/ml BAL fluid (detected by an 8-panel assay)
IL-18(8P)	Picogram IL-12 protein/ml BAL fluid (detected by an 8-panel assay)
MCP-1(8P)	Picogram MCP-1 protein/ml BAL fluid (detected by an 8-panel assay)
MIP-2(8P)	Picogram MIP-2 protein/ml BAL fluid (detected by an 8-panel assay)
TNF α (8P)	Picogram TNF α protein/ml BAL fluid (detected by an 8-panel assay)
IL-13(8P)	Picogram IL-13 protein/ml BAL fluid (detected by an 8-panel assay)
IL-6(8P)	Picogram IL-6 protein/ml BAL fluid (detected by an 8-panel assay)
G-CSF(28P)	Picogram G-CSF protein/ml BAL fluid (detected by a 27-panel assay)
Eotaxin(28P)	Picogram Eotaxin protein/ml BAL fluid (detected by a 27-panel assay)
GM-CSF(28P)	Picogram GM-CSF protein/ml BAL fluid (detected by a 27-panel assay)
IL-1 α (28P)	Picogram IL-1 α protein/ml BAL fluid (detected by a 27-panel assay)
Leptin(28P)	Picogram Leptin protein/ml BAL fluid (detected by a 27-panel assay)
MIP-1 α (28P)	Picogram MIP-1 α protein/ml BAL fluid (detected by a 27-panel assay)
IL-4(28P)	Picogram IL-4protein/ml BAL fluid (detected by a 27-panel assay)
IL-1 β (28P)	Picogram IL-1 β protein/ml BAL fluid (detected by a 27-panel assay)
IL-2(28P)	Picogram IL-2 protein/ml BAL fluid (detected by a 27-panel assay)
IL-6(28P)	Picogram IL-6 protein/ml BAL fluid (detected by a 27-panel assay)
EGF(28P)	Picogram EGF protein/ml BAL fluid (detected by a 27-panel assay)
IL-13(28P)	Picogram IL-13 protein/ml BAL fluid (detected by a 27-panel assay)
IL-10(28P)	Picogram IL-10 protein/ml BAL fluid (detected by a 27-panel assay)
IL-12(p70)(28P)	Picogram IL-12 protein/ml BAL fluid (detected by a 27-panel assay)
IFN γ (28P)	Picogram IFN γ protein/ml BAL fluid (detected by a 27-panel assay)
IL-5(28P)	Picogram IL-5 protein/ml BAL fluid (detected by a 27-panel assay)
IL-17A(28P)	Picogram IL-17a protein/ml BAL fluid (detected by a 27-panel assay)
IL-18(28P)	Picogram IL-18 protein/ml BAL fluid (detected by a 27-panel assay)
MCP-1(28P)	Picogram MCP-1 protein/ml BAL fluid (detected by a 27-panel assay)
IP-10(28P)	Picogram IP-10 protein/ml BAL fluid (detected by a 27-panel assay)
GRO/KC(28P)	Picogram GRO/KC protein/ml BAL fluid (detected by a 27-panel assay)
VEGF(28P)	Picogram VEGF protein/ml BAL fluid (detected by a 27-panel assay)
Fractalkine(28P)	Picogram fraktalkine protein/ml BAL fluid (detected by a 27-panel assay)
LIX(28P)	Picogram LIX protein/ml BAL fluid (detected by a 27-panel assay)
MIP-2(28P)	Picogram MIP-2 protein/ml BAL fluid (detected by a 27-panel assay)
TNF α (28P)	Picogram TNF α protein/ml BAL fluid (detected by a 27-panel assay)
RANTES(28P)	Picogram RANTES protein/ml BAL fluid (detected by a 27-panel assay)
Hyperplasia	Whether lung hyperplasia is present or not in the lung
Nodular lesion	Whether nodular lesions are present or not in the lung
Cellularity	Whether there was in increase in the infiltration of cells or not in the lung

Trichrome	Whether positive to trichrome staining or not in the lung
MWCNT	Multi-walled carbon nanotubes
ND	Not determined
Gene ID	Symbol for the transcript detected
Rnor6.description	Description of the transcript in the Rnor6 genome database
Counts(L)	Number of reads for the transcript in lungs of individual rats (AA = Air exposed; MWCNT = MWCNT exposed)
Transcript	NCBI Reference Sequence ID for the transcript detected
Counts(B)	Number of reads for the transcript in blood of individual rats (AA = Air exposed; MWCNT = MWCNT exposed)