ADDITIONAL MATERIALS AVAILABLE ON THE HEI WEB SITE

Research Report 184

Advanced Collaborative Emissions Study (ACES): Lifetime Cancer and Non-Cancer Assessment in Rats Exposed to New-Technology Diesel Exhaust

Part 4. Assessment of Plasma Markers and Cardiovascular Responses in Rats After Chronic Exposure to New-Technology Diesel Exhaust in the ACES Bioassay

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Additional Materials 3. Plasma Levels of Markers Measured in Rats Exposed to Acrolein as Positive Technical Controls

Additional Materials available on the Web may appear in a different order from the original Investigators' Report, and some remnants of their original names may be apparent. HEI has not changed the content of these documents, only the original identifier (letter or number).

This document was reviewed by the HEI ACES Review Panel but did not undergo the HEI scientific editing and production process.

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Additional Materials 3, Table 1. Plasma Levels of Markers Measured in Rats Exposed Acutely to Acrolein as Positive Technical Controls

	Control (Mean ± SE)[a]	**Acrolein (Mean ± SE)[a]**	***P* value[b]**
CHOL (mg/dL)	52.72±3.55	89.40±4.85	**0.0048**
HDL (mg/dL)	24.18±1.46	47.70±3.09	**0.0074**
LDL (mg/dL)	18.96±0.28	25.10±0.18	**0.0002**
HDL/LDL	1.28±0.07	1.90±0.12	**0.0154**
TRIG (mg/dL)	25.96±7.15	17.40±2.31	0.3540
ALB (g/dL)	3.13±0.26	3.80±0.07	0.1260
TP (g/dL)	4.37±0.41	5.30±0.14	0.1300
NAP[c] (g/dL)	1.24±0.16	1.60±0.14	0.1852
ALT (U/L)	45.22±0.75	40.80±2.54	0.2197
AST (U/L)	67.84±11.53	73.70±3.18	0.6686
CK (U/L)	257.73±148.44	232.80±26.79	0.8829
CREA (mg/dL)	0.49±0.02	0.60±0.04	0.1526
LDH (U/L)	157.47±58.81	169.90±17.97	0.8560
	(Mean ± SD)[d]	**(Mean ± SD)[d]**	
GM-CSF (pg/mL)	100.2±14.5	86.3±8.2	NA
MCP-1 (pg/mL)	189.4±13.2	109.0±5.3	NA
IL-1ß (pg/mL)	22.0±0.2	49.8±2.6	NA
IL-6 (pg/mL)	247.2±19.1	117.9±14.7	NA
IL-10 (pg/mL)	5.2±0.4	4.8±0.0	NA
IFN-γ (pg/mL)	27.7±6.3	24.5±5.2	NA
KC (pg/mL)	2.6±0.5	1.8±0.4	NA
TNF-α (pg/mL)	4.4±0.2	4.3±0.1	NA
VEGF (pg/mL)	20.4±2.3	18.4±1.8	NA
sICAM-1 (pg/mL)	2725.0±465.7	2725.0±222.1	NA
Fibrinogen (pg/mL)	596.7±81.5	656.6±17.4	NA
Leptin (pg/mL)	1.4±0.3	2.5±0.5	NA
CRP (ng/mL)	215.6±8.5	357.8±2.2	NA

[a] Mean ± SE of samples from 3 rats.
[b] *P* values < 0.05 are in **bold**, showing statistical significance; NA indicates not applicable.
[c] NAP indicates non-albumin protein.
[d] Mean ± SD from one pooled sample (from 3 rats) measured twice.