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

Daniel J. Conklin and Maiying Kong

Additional Materials 2. Aorta Morphometry in Rats Over 24 Months of Exposure to Filtered Air or Diesel Exhaust Emissions

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).

Additional Materials 2 was originally Appendix B.

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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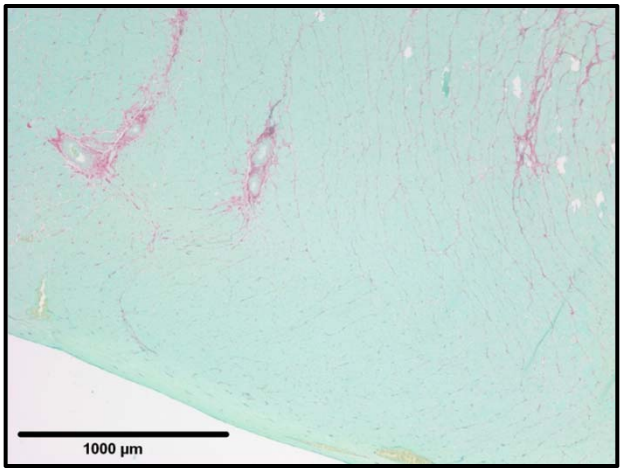
Appendix B:

Figure B.1. Cardiac fibrosis in rat left ventricle (LV). (A) Representative photomicrograph of a longitudinal mid-LV section of rat epicardium stained with Sirius Red/ Fast Green to demarcate fibrosis (collagen; red) from non-fibrotic cardiac tissue. Total LV fibrosis (as % of total area) in female (B) or male (C) rats exposed to air or to diesel exhaust (DE) at low, mid or high level for 12 and 24 months. (D) Avascular cardiac fibrosis (as % of area excluding vascular staining) in male rats exposed to air or to DE at low, mid or high level for 12 and 24 months. Values = mean ± SE; *N* = 7 rats/group unless otherwise indicated in Table 7.

A.



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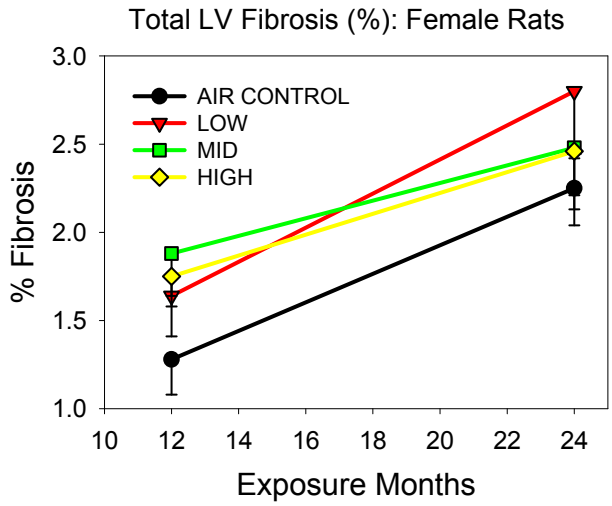

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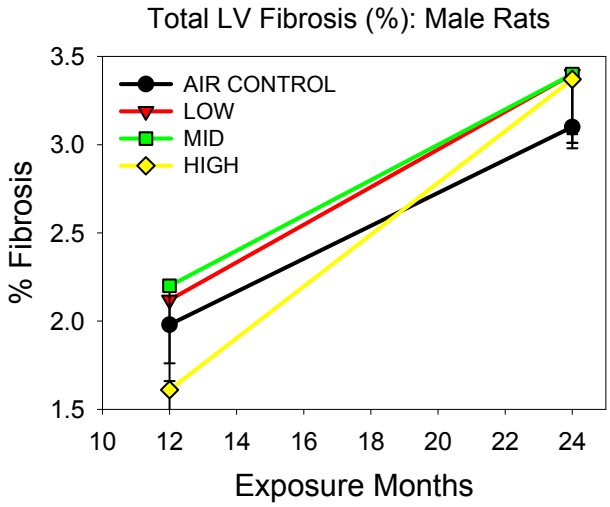

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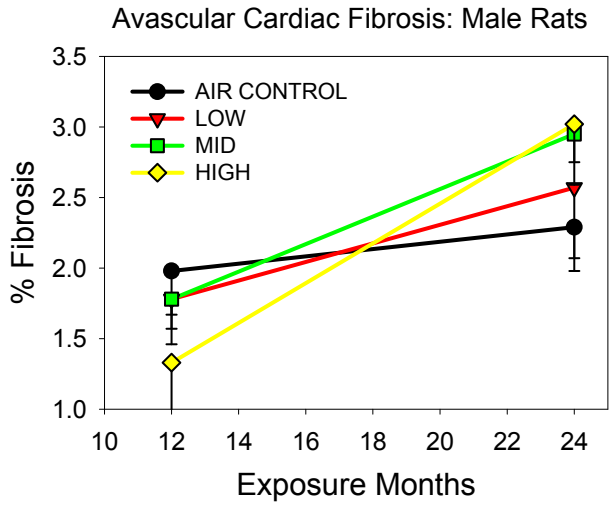
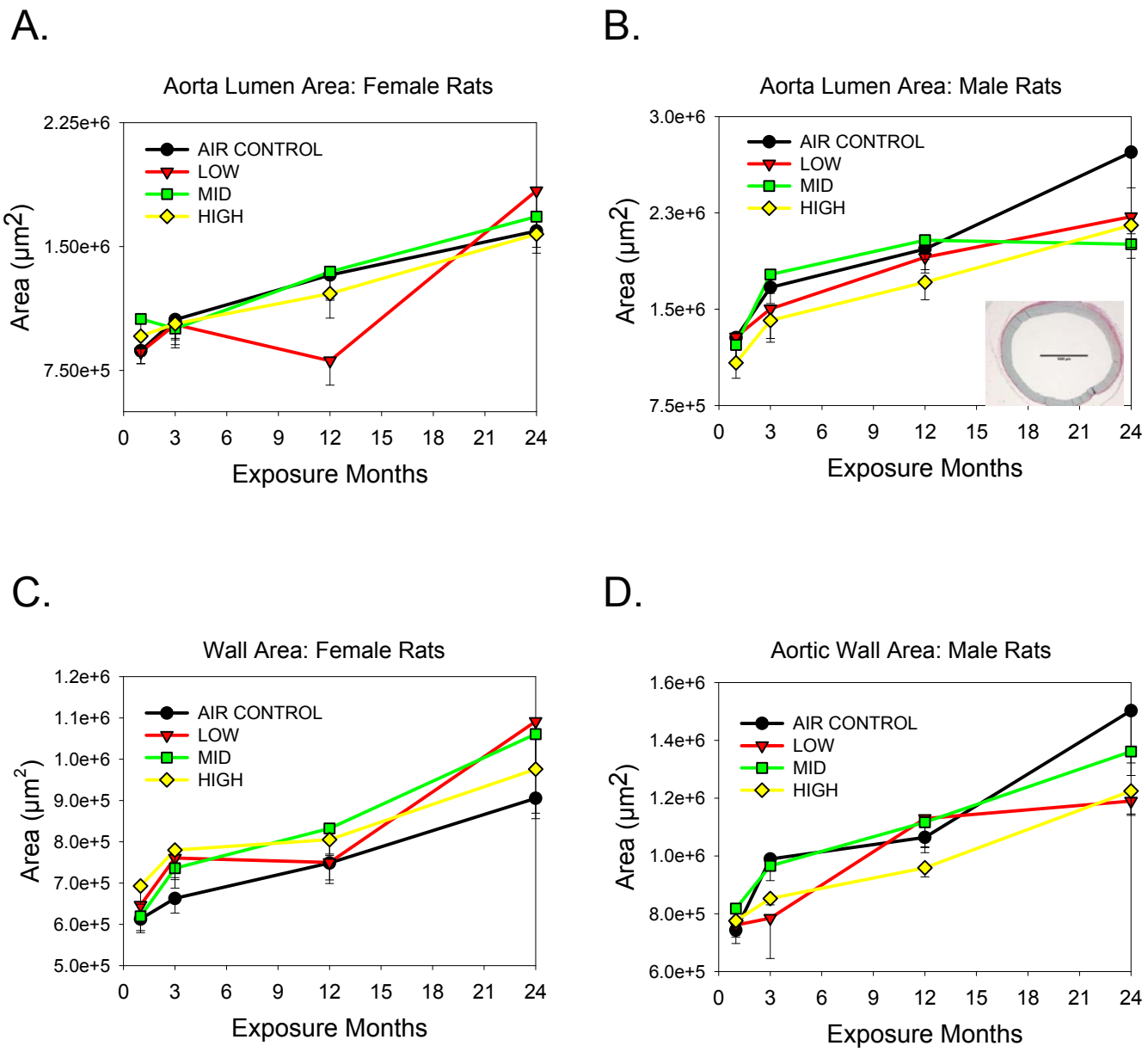


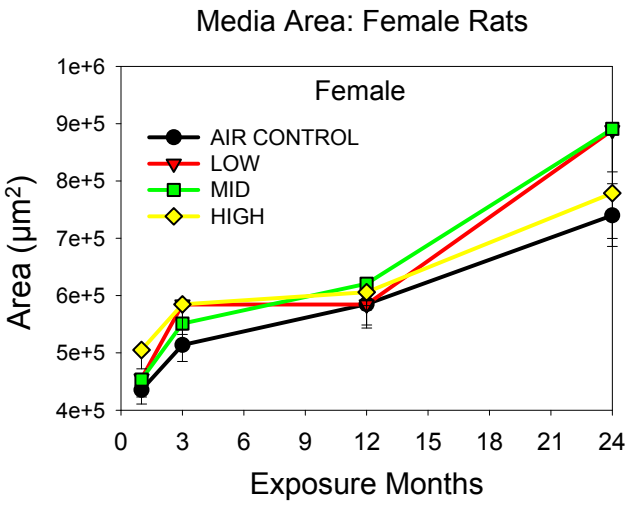
Appendix B .

Figure B.2. Aorta morphometry in female (A, C, E, G) and male (B, D, F, H) rats over 24 months of exposure to filtered air or to diesel exhaust (DE) at low, mid or high level. Aorta lumen (A, B), aorta wall (C, D), and aorta media areas (E, F µm²) and aorta media thickness (G, H; µm) were measured in 1-3 cross sections of proximal thoracic aorta stained with Sirius Red/ Fast Green to demarcate the media and adventitial border. Values = mean ± SE; *N* = 7 rats/group unless otherwise indicated in Table 7.



Appendix B:
Figure B.2. (cont.)

E.



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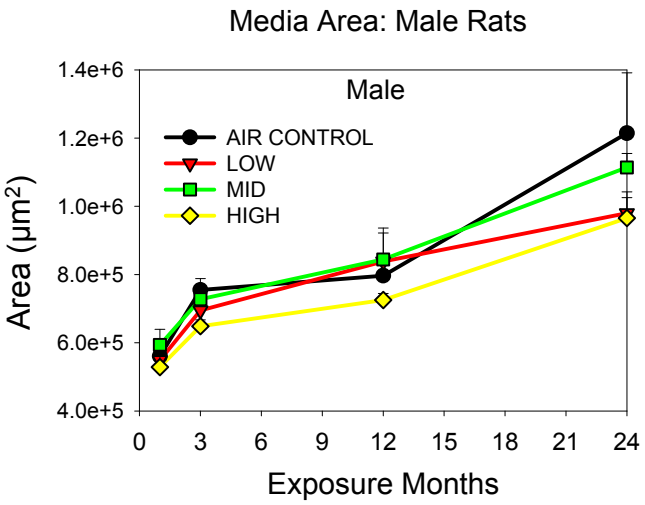

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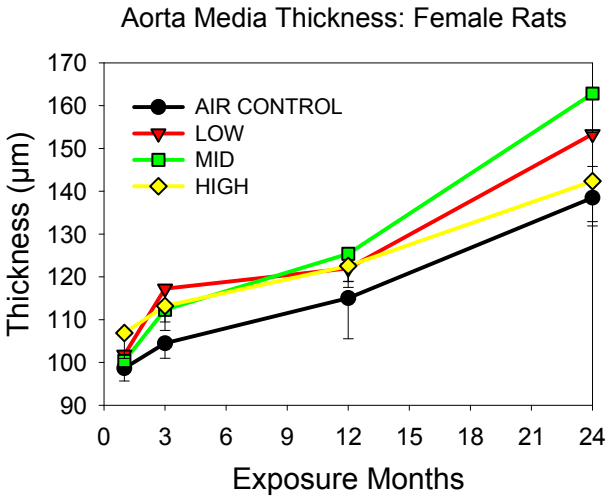
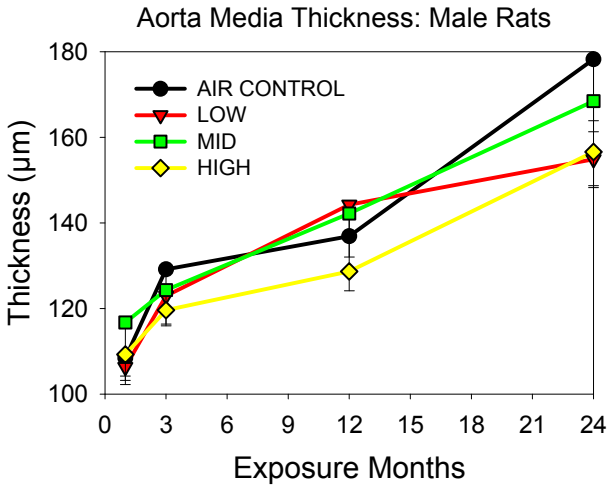
H.