Ozone attenuated the increase in FVC and FEV1 after exposure to 0 ppb

LUNG FUNCTION

Ozone attenuated the increase in % spumum neoplasts 22hr after exposure and plasma CC16 4hr after exposure at 120 ppb, but not at 70 ppb

CORRELATION OF PERSONAL AND AMBIENT O3 AND NO2

Correlation of O3 vs. Ambient O3 (24 hour mean)

RESULTS OF PART 2

OZONE-INDUCED CAROTID ENDOTHELIAL FUNCTION

Cardiac function: Measured by ECG (24 hour Holter with 12-lead recording averaged over 5 min and 24 hours)

• Heart rate and HRV parameters in both the time domain (SDNN, and RMSSD) and the frequency domain (LF, HF, and LF/HF ratio).

• Repolarization (QT, T-wave amplitude, and ST-segment).

Endothelial activation, thrombosis, inflammation, and microparticle-associated prothrombotic markers: vWf, tissue factor associated with microparticles (MP-TFA), platelet activation, fibrinogen

Lung function (spirometry):

• FEV1, FVC, and FEV25-75.

• Lung injury markers:

  - C-reactive protein (CRP), 8-isoprostane, nitrotyrosine, and interleukin-6 (IL-6).

• Repolarization (QTc, T-wave amplitude, and ST-segment)

• Genetic susceptibility to ozone:

  - GSTM1 null genotype

• Differential white cell counts.

• Genetic susceptibility to ozone:

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• Airway inflammation markers (in sputum samples):

  - Differential blood cell counts.

  - α1-antitrypsin

• Lung injury markers:

  - CC16

• Vascular function (blood pressure and flow-mediated dilation)

  - Blood pressure (SBP and DBP)

  - Endothelial function measured as flow-mediated dilation (FMD) of the brachial artery, and venous blood markers of platelet activation, thrombosis, inflammation, and microparticle-associated prothrombotic markers

• Oxygen consumption: Measured as oxygen consumption in the brachial artery, and venous blood markers of platelet activation, thrombosis, inflammation, and microparticle-associated prothrombotic markers

• Lung function (spirometry): FVC, FEV1, and FEV25-75

• Genetic susceptibility to ozone:

  - GSTM1 null genotype

• Differential white cell counts.

• Vascular function (blood pressure and flow-mediated dilation)

  - Blood pressure (SBP and DBP)

• Lung function (spirometry): FVC, FEV1, and FEV25-75

• Genetic susceptibility to ozone:

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• Differential white cell counts.

• Oxidative stress and systemic inflammation

  - α1-antitrypsin

• Airway inflammation markers (in sputum samples):

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