SUPPLEMENTARY FIGURES

A pilot study to assess the impact of thirdhand vaping exposures on lung and liver gene expression and DNA methylation in a mouse model.

Chukwudike Igwe,^{1*} Kirti Sharma,^{2*} Maksat Babayev,¹ Dustin Rousselle, Shikha Sharma,¹ ¹Carolyn Damilola Ekpruke,¹ Rachel Alford,¹ David M Buechlein,³Aaron Buechlein,³ Chris Hemmerich³, Douglas B. Rusch,³ Patricia Silveyra,¹ Sarah Commodore¹

¹Department of Environmental and Occupational Health, School of Public Health, Indiana University Bloomington, USA

²Department of Epidemiology and Biostatistics, School of Public Health, Indiana University Bloomington, USA

³Center for Genomics and Bioinformatics, Indiana University, Bloomington, IN, 47405, USA

*Both authors contributed equally and should be regarded as co-first authors

Correspondence: Sarah Commodore (scommod@iu.edu).

Study Summary

A total of seven mice (five males and two females) were exposed to vape-contaminated towels (treatment group) and a total of six mice (four males and two females) were exposed to control towels (control group). Exposure duration was one hour/day, five days/week for three weeks. Animals were sacrificed after 48 hours of the last exposure. Below, we present the most significantly more (up-) and less (down-) methylated protein coding genes while ignoring pseudogenes and other RNA in the liver and lungs of control and thirdhand vape exposed animals.

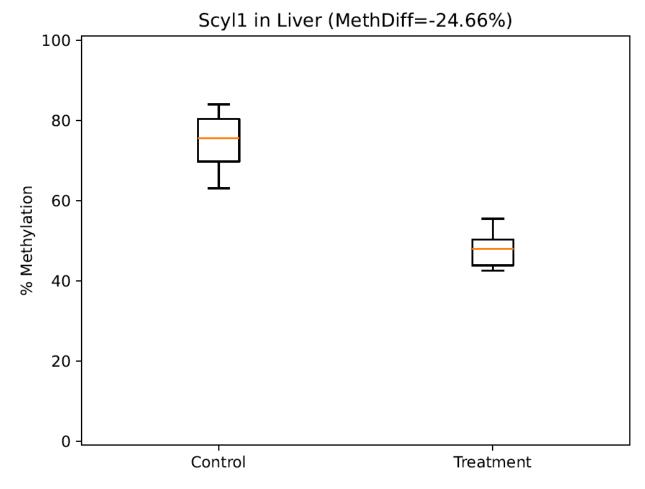


Fig A. Compared to the control group, *Scyl1* appears to be less methylated in the livers of thirdhand vape exposed mice (treatment group) [n=6 for control group (2 females and 4 males); n=7 for treatment group (2 females and 5 males)].

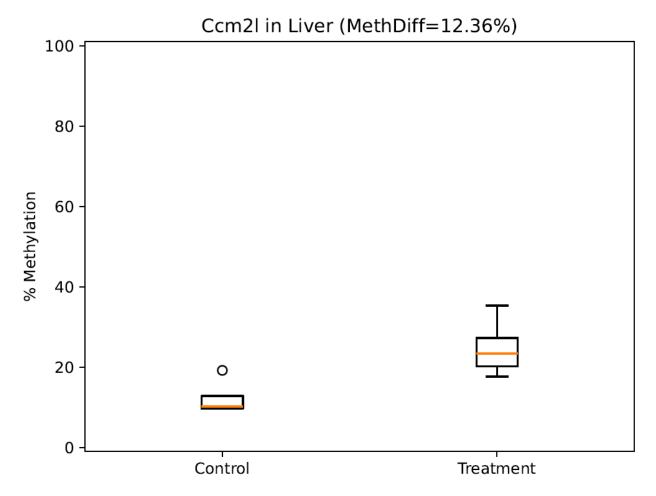


Fig B. Compared to the control group, *Ccm2l* appears to be more methylated in the livers of thirdhand vape exposed mice (treatment group) [n=6 for control group (2 females and 4 males); n=7 for treatment group (2 females and 5 males)].

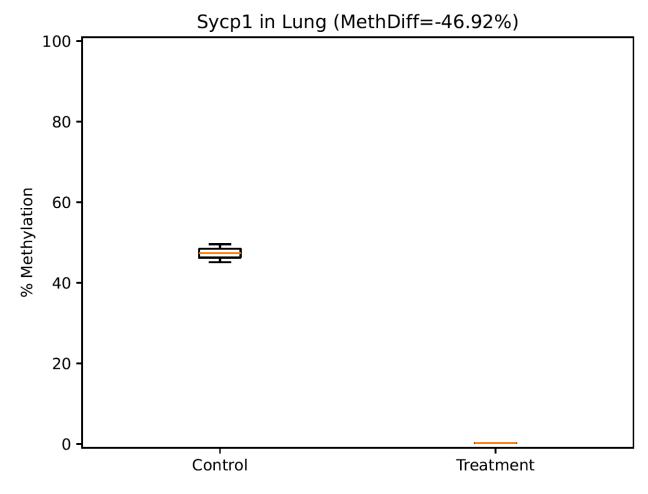


Fig C. Compared to the control group, *Sycp1* appears to be less methylated in the lungs of thirdhand vape exposed mice (treatment group) [n=2 for control group (1 male and 1 female) and n=1 for treatment group (1 male)].

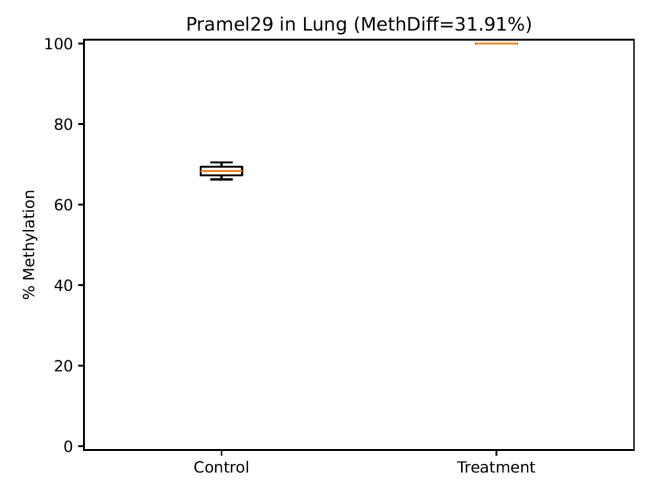


Fig D. Compared to the control group, *Pramel29* appears to be more methylated in the lungs of thirdhand vape exposed mice (treatment group) [n=2 for control group (1 male and 1 female) and n=1 for treatment group (1 male)].