Interactive comment on "Gasoline aromatic: a critical determinant of urban secondary organic aerosol formation" *by* Jianfei Peng et al.

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The authors presented the contribution of gasoline vehicle exhaust to SOA formation in urban atmosphere. The manuscript indicated the importance of the vehicular gasoline compositions and clarified the principal problem of vehicular emissions for haze pollution in China. However, in your literature review, the authors missed some new findings. E. g. Tang et al. (2015) illustrated the differences of gasoline compositions between China and USA and found alkenes and aromatics in China were 4.9% and 9.6% higher than that in USA, respectively. After a while, they also found mortality was correlated with vehicular emissions in Beijing (Tang et al., 2017). Therefore, I suggest the authors discuss these new findings on the chemical compositions of gasoline and the relationship between vehicular emissions and human health, which can emphasize

the motivation of this study.

We thank Dr. Tang for providing this information. We have added the following sentence in the discussion. "Recent study found that gasoline aromatic content in China was 9.6% higher than that in USA (Tang et al., 2015)."