Reviewer’s report

Title: RNA sequencing identifies novel non-coding RNA and exon-specific effects associated with cigarette smoking

Version: 0 Date: 14 Jul 2017

Reviewer: Rosa Farner

Reviewer's report:

The work of Parker et al is of interest as up to date little is known about the impact of smoking in gene isoform expression. I have some concerns that should be addressed.

Major Points

The current analysis mixes both patients with COPD and smokers with normal lung function from the COPDgene study, and analyzes the effect of active vs. former smoking status. If disease status is not relevant it could be mentioned, or it will be nice to know if the same number of individuals with disease were included in both groups.

On reference to the differential expression, did the authors establish a cutoff on the basis of level of fold change (in supplementary table 1 seems not)?

Does time since smoking cessation modify the results? It might be a limiation of the study.

Minor points

The level of detail in methods of the biological determinations should be improved (i.e details about the commercial suppliers).

Are the methods appropriate and well described?
If not, please specify what is required in your comments to the authors.

Yes

Does the work include the necessary controls?
If not, please specify which controls are required in your comments to the authors.

Yes
Are the conclusions drawn adequately supported by the data shown?  
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Yes

Are you able to assess any statistics in the manuscript or would you recommend an additional statistical review?  
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I am able to assess the statistics

Quality of written English  
Please indicate the quality of language in the manuscript:

Acceptable

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