REVIEWER'S COMMENTS:  
  
- The paper presents a work based on SSM to guide lobar segmentation. PCA combined with Hessian matrix analysis and a connected component eigenvector based analysis are used to determine a set of fissure-like candidate points. Splines are fitted and fissure plane extrapolated to the lung boundaries. The method was tested on healthy young subjects and older subjects with fibrosis.  
  
What I am lacking to see in this work is how it relates, its novelty and advantages over existing techniques of the literature. This reviewer is not familiar with lung lobe/fissure segmentation but a simple research of the literature has presented several approahces dealing also with pathological casses and difficulties as incomplete fissures (eg. van Rikxoort, et al IEEE TMI 29(6), 2010 ; Yu et al, J Digit Imaging. 2014 Feb; 27(1): 58–67; Bragman et al IEEE TMI 2017). Please add a breif overview of related technqiues and how your work differe from them.  
  
Please include details of the image acquisition/resolution (only thickness is provided). Please comment on how gold standard is created. Please specify and cite which softwares/methods are you using to compare with.  
  
- Combination of shape model, hessian filtering and spline fitting for lung lobe segmentation. There is unfortunately no comparison to related work, but results seem good and this is not yet a solved problem.   
The method description is very unclear. How are corresponding points obtained to perform PCA? How were weights of a lung model used to deform a lobe model? Some equations would be helpful.  
  
  
- Thresholding does not work for lung segmentation even on normal subjects because of trachea and bronchial branches, and especially in disease cases. How were landmarks required by ASM found? Especially since the fissures were also part of the ASM and so landmarking is even harder and full of perils in 3D space. Not clear if each lobe was modeled separately and so the fissure got defined by the gap between lobes. Otherwise I am not sure how meshed surfaces can be generated with branching surfaces. Otherwise an interesting approach. Only testing on larger number of cases with other pathologies will tell how useful it is.  
  
Thank you,