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CT of pulmonary emphysema: current status, challenges, and future directions

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Dear Sir,
I would like to congratulate Dr. Litmanovich and colleagues on their beautiful and useful review [1], but I would like to highlight the following two statements: 1. "The introduction of multidetector CT units now allows acquisition of such high-resolution CT in a volumetric manner over the entire lung, and this approach has been shown to be suitable for the assessment of emphysema [22]." 2. "From these observations, Madani et al. concluded that the relative lung areas with attenuation coefficients lower than -960 or -970 HU and first percentile were valid indexes to quantify pulmonary emphysema on multidetector row CT scans."

For these statements, the authors refer to a paper by Dr. Madani [2]; however, the problem is that despite the use of volume data, axial reconstructions were performed for assessment of emphysema and histo-

pathologic correlation and an extrapolation of these findings for volumetric data is not reliable. To the best of my knowledge, no paper has reported the correlation of volumetric data with histological specimens, presumably because of the associated technical difficulties. I hope this small comment encourages investigators to reach a definitive solution to this issue.

References

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