ESPS PEER-REVIEW REPORT

Name of journal: World Journal of Radiology
ESPS manuscript NO: 21175
Title: Texture analysis on parametric maps derived from dynamic contrast-enhanced magnetic resonance imaging in head and neck cancer
Reviewer's code: 03364027
Reviewer's country: United States
Science editor: Fang-Fang Ji
Date sent for review: 2015-07-04 19:39
Date reviewed: 2015-08-13 06:31

CLASSIFICATION	LANGUAGE EVALUATION	SCIENTIFIC MISCONDUCT	CONCLUSION
[ ] Grade A: Excellent	[Y] Grade A: Priority publishing	Google Search:	[ ] Accept
[ ] Grade B: Very good	[ ] Grade B: Minor language	[ ] The same title	[ ] High priority for
[Y] Grade C: Good	polishing	[ ] Duplicate publication	publication
[ ] Grade D: Fair	[ ] Grade C: A great deal of	[ ] Plagiarism	[ ] Rejection
[ ] Grade E: Poor	language polishing	[Y] No	[Y] Minor revision
	[ ] Grade D: Rejected	BPG Search:	[ ] Major revision
		[ ] The same title	
		[ ] Duplicate publication	
		[ ] Plagiarism	
		[Y] No	

COMMENTS TO AUTHORS

This paper describes a study to assess the treatment response in patients with head and neck squamous cell carcinoma (HNSCC) using quantitative texture metrics of energy (E) and homogeneity (H). The authors observed that the heterogeneity of the tumors has been reduced after the treatment and the texture biomarkers can be used to evaluate the treatment response. Overall, the paper is well written and relative easy to follow. However, there are several issues that need to be addressed. Firstly and probably the most importantly, as the authors mention in the paper, the study had a really small cohort of patients. This makes the conclusion of the statistical analysis rather weak. This is most problematic for the locoregional failure (LF) group with only 2 patients. In this case, the statistical analysis for LF patients is not really valuable. I recommend the author to either recruit more LF patients or remove the statistical analysis that involves LF patients.   Secondly, please provide more details of the DCE-MRI acquisition. Specify the acquisition parameters, such as, field of view, image size, bandwidth, number of slices, slice thickness, etc, so that the readers can replicate the acquisition. Thirdly, similar to Figure 1, it will be helpful to show another example with locoregional control

before and after the treatment. It will also be very helpful to indicate the energy and homogeneity values of the ktrans and ve map for both figures. That will give the readers a better understanding of the proposed texture metrics.

ESPS PEER-REVIEW REPORT

Name of journal: World Journal of Radiology
ESPS manuscript NO: 21175
Title: Texture analysis on parametric maps derived from dynamic contrast-enhanced magnetic resonance imaging in head and neck cancer
Reviewer's code: 02667199
Reviewer's country: China
Science editor: Fang-Fang Ji
Date sent for review: 2015-07-04 19:39
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CLASSIFICATION	LANGUAGE EVALUATION	SCIENTIFIC MISCONDUCT	CONCLUSION
[ ] Grade A: Excellent	[Y] Grade A: Priority publishing	Google Search:	[ ] Accept
[Y] Grade B: Very good	[ ] Grade B: Minor language polishing	[ ] The same title	[ ] High priority for publication
[ ] Grade C: Good	[ ] Grade C: A great deal of language polishing	[ ] Duplicate publication	[ ] Rejection
[ ] Grade D: Fair	[ ] Grade D: Rejected	[ ] Plagiarism	[Y] Minor revision
[ ] Grade E: Poor		[Y] No	[ ] Major revision
		BPG Search:	
		[ ] The same title	
		[ ] Duplicate publication	
		[ ] Plagiarism	
		[Y] No	

COMMENTS TO AUTHORS

This manuscript evaluated the merits of parameters, energy (E) of ve and H, on parametric maps derived from pharmacokinetic modeling with DCE-MRI as imaging biomarkers for the prediction of treatment response in patients with head and neck squamous cell carcinoma. The results revealed that the imaging biomarker energy (E) of ve was significantly higher in intra-treatment scans, relative to pretreatment scans, while no significant changes were found for the mean and standard deviation for Ktrans and ve. These results were very exciting and might be helpful in evaluation of early treatment response to chemo-radiation therapy.   General questions "All patients had chemo-radiation treatment" in methods was not accurate, since methods in the section of materials and methods described "All patients were treated with intensity-modulated radiation therapy with dose prescriptions of 70 Gy for gross disease, 59.4 Gy for high-risk regions, and 50 to 54 Gy for low-risk regions". Chemotherapy was not administered for all patients according to .   Therefore, chemo-radiation treatment should be replaced with radiation therapy in the sections of abstract, materials, results, and conclusion.   Abstract Results were too simple.   Results There was no unit for

Ktrans and ve , E, and H value.