Reviewer's report

Title: Upregulation of heme oxygenase-1 in colorectal cancer patients with increased circulation carbon monoxide levels, potentially affects chemotherapeutic sensitivity

Version: 2 Date: 21 March 2014

Reviewer: Takahiro Seki

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Minor Essential Revisions

Overall, this is an interesting and important report looking into heme oxygenase-1 (HO-1) expression level and the concentration of circulation carbon monoxide in blood in colorectal cancer (CRC) having patients that might be biomarker candidate for CRC.

However, there is an issue regarding manuscript that should be addressed. Authors showed that it is unlike to the impact of age, gender, metastasis and so on, except tissue character, to HO-1 expression analyzed by Fisher's extract test, however, Table 2 showed that lymph node metastasis has a tendency of HO-1 expression level. It would be very nice to see multivariate statistics with different parameters.

Specific points,

I appreciate that some typographical issues will be picked up by editors, but I would recommend reading through and checking them before resubmission, e.g. plops tissues on page 8 line 4.

Please add scale bars in Figure 1 and Figure 2.

P5 line 1. Please describe formalin concentration.
P5 line 13. Please mention company name, not distributor, and product code.
P5 line 17. Please describe numbers of the pathologists who evaluated the staining samples.
P6 line 10. Please add methods for quantification of the PCR band.
P7 line 18. What does it meant of PBS (-)?
P8 line 20. No significant is right, however, there is a tendency in lymph node according to Table 2. Thus, it should be mentioned.
P11 line 8. The sentence sounds not clear, therefore, it should be revised to clear what authors would like to tell.

Please provide internal genes, such as actin and GAPDH, bands in Figure 6 a-c and revise y-axis to 100% of Figure 6d, allowing us to compare with other cell lines.
Level of interest: An article of importance in its field

Quality of written English: Needs some language corrections before being published

Statistical review: No, the manuscript does not need to be seen by a statistician.

Declaration of competing interests:
I declare that I have no competing interests.