

Peer Review File

Article information: <https://dx.doi.org/10.21037/aoe-22-24>

Reviewer Comments

Comment 1: Please define “signature Raman spectra” mentioned in line 65.

Reply 1: We have added to lines 30 and 65 clarifying this phrase to mean “Raman spectra unique to each material”.

Changes in the text: Lines 30 and 65; pages 2-3

Comment 2: In line 96 the word “make” should be changed to “makes”.

Reply 2: We have modified our text as advised to line 96.

Changes in the text: Line 96; page 4

Comment 3: In line 102 “such as gold or silver” should be between commas. Change it to “metal, such as gold or silver, that...”

Reply 3: We have added commas to line 102.

Changes in text: Line 102; page 4

Comment 4: It is unclear what the sentence in lines 113-115 is trying to convey.

Reply 4: Thank you for this comment. Chemical enhancement is an incompletely understood mechanism of surface-enhanced Raman spectroscopy with the predominant theory suggesting that new surface complexes between the analyte and substrate enhance the Raman signal. We have clarified this in lines 113-115.

Changes in text: Line 104, 113-115; pages 4-5

Comment 5: Please define acronyms (e.g. EGRF, HER2, Ag).

Reply 5: We have added definitions to these acronyms.

Changes in text: Line 135, 243, 261; pages 5, 9

Comment 6: Please describe where the fiber optic probe is inserted in line 244.

Reply 6: We have clarified in line 244 that the fiber optic probe is inserted directly into the esophagus.

Changes in text: Line 244; page 9

Comment 7: The purpose of the three asterisk in line 321 is unclear.

Reply 7: We thank you for noting this, and have removed the three asterisks and the preceding sentence from the manuscript.

Changes in text: Line 321; page 11

Comment 8: In Fig 1. The caption references Fig 1(a) and Fig 1(b). Please edit the figure to remove the (c) label and include labels for (a) and (b).

Reply 8: Thank you for noting this. We have reuploaded a corrected figure with labels for (a), (b) with (c) removed. In addition, we have reuploaded an updated permission from the Royal Society of Chemistry from which this figure is reproduced.

Changes in text: Figure 1, figure permissions

Comment 9: Please increase the text size within Fig 2. To improve readability.

Comment 10: Please readjust the color or labelling for Fig 2(b) to more clearly display the SERS spectra of esophageal cancer urine; the red is difficult to differentiate with the green standard deviation region.

Reply 9 and 10: We have increased the text size and readjusted the colors as advised for Fig 2.

Changes in text: Figure 2