## **Electronic Supporting Information**

## Gold nanoparticles as a substrate in bio-analytical near-infrared surface-enhanced Raman scattering

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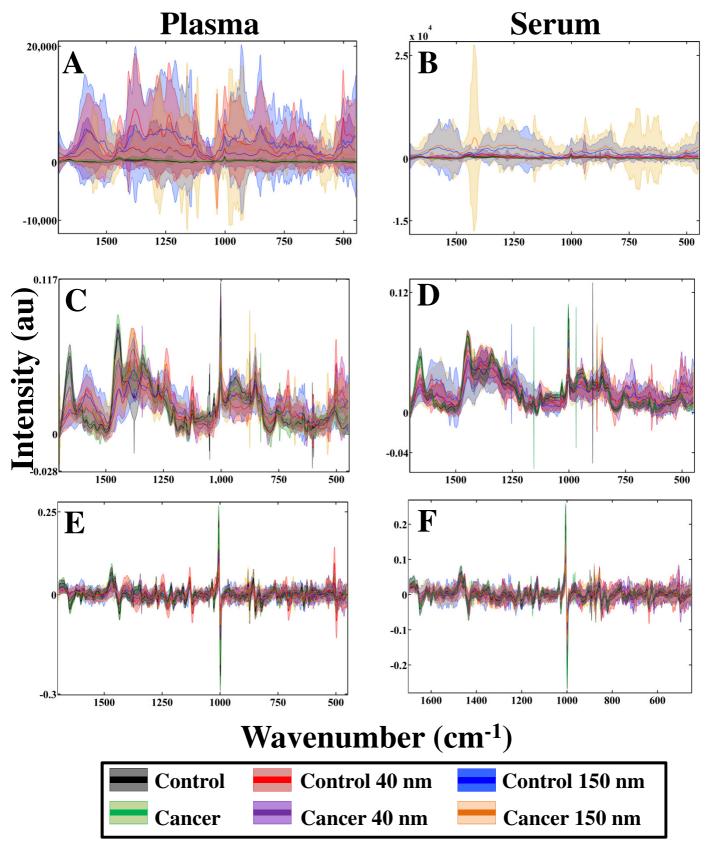
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## **Summary**

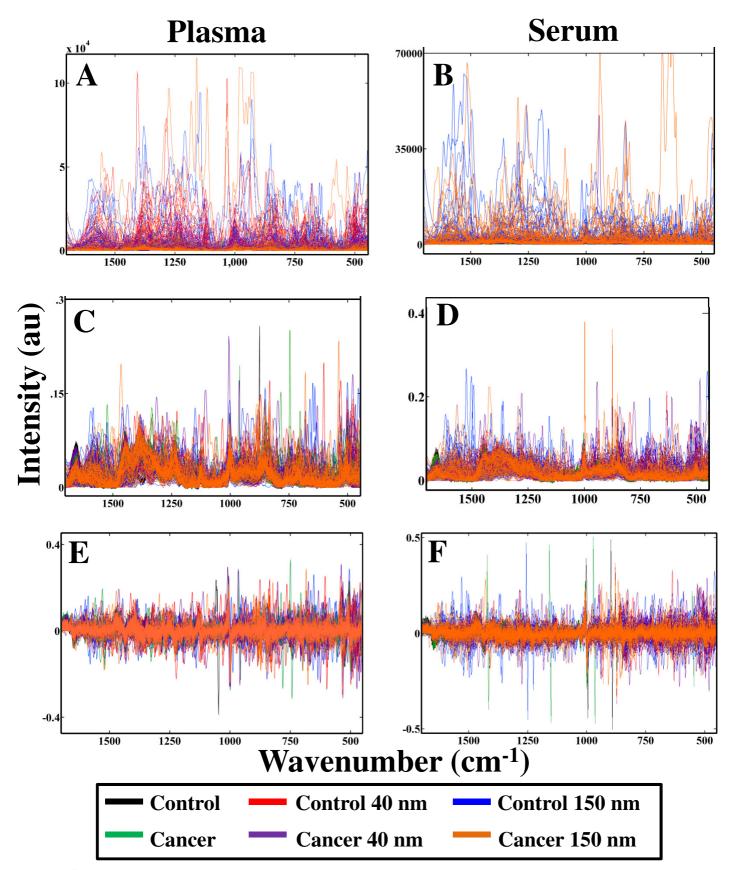
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**Number of Figures: 3** 

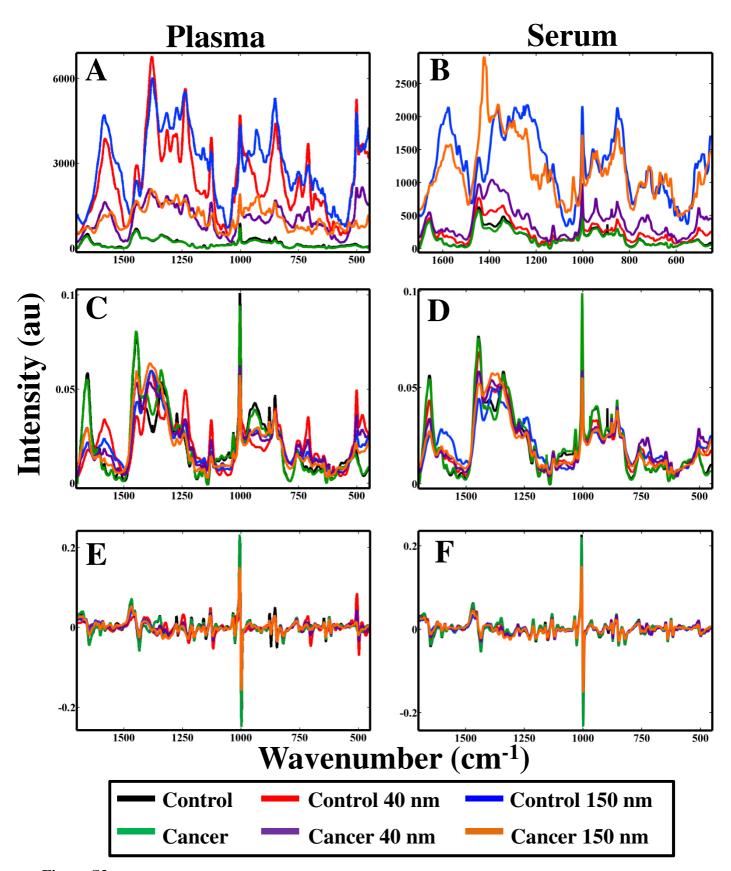
Number of Tables: 0



**Figure S1.** Influence of nanoparticles on SERS effect in blood plasma or serum samples. Raman spectra (class means with standard deviation) of blood plasma (A, C, E) or serum samples (B, D, F) with or without gold nanoparticles: following polynomial baseline correction to show raw enhancement (A, B), polynomial baseline correction followed by vector normalisation (C, D) or  $1^{st}$  order differentiation followed by vector normalisation (E, F).



**Figure S2.** Influence of nanoparticles on SERS effect in blood plasma or serum samples. Raman spectra (all spectra in dataset) of blood plasma (**A**, **C**, **E**) or serum samples (**B**, **D**, **F**) with or without gold nanoparticles: following polynomial baseline correction to show raw enhancement (**A**, **B**), polynomial baseline correction followed by vector normalisation (**C**, **D**) or 1<sup>st</sup> order differentiation followed by vector normalisation (**E**, **F**).



**Figure S3.** Influence of nanoparticles on SERS effect in blood plasma or serum samples. Class means spectra of all data acquired in this study, including non-enhanced spectra. Blood plasma (**A**, **C**, **E**) or serum samples (**B**, **D**, **F**) with or without gold nanoparticles: following polynomial baseline correction to show raw enhancement (**A**, **B**), polynomial baseline correction followed by vector normalisation (**C**, **D**) or 1<sup>st</sup> order differentiation followed by vector normalisation (**E**, **F**).