

## Supplementary information

### **A new approach to find biomarkers in chronic fatigue syndrome/myalgic encephalomyelitis (CFS/ME) by single-cell Raman micro-spectroscopy**

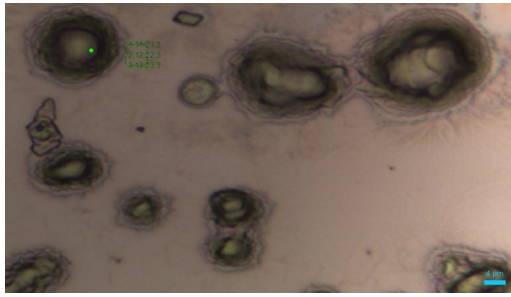
*Jiabao Xu<sup>1</sup>, Michelle Potter<sup>2</sup>, Cara Tomas<sup>3</sup>, Jo Elson<sup>3</sup>, Karl J. Morten<sup>2</sup>, Joanna Poulton<sup>2</sup>, Ning Wang<sup>4</sup>, Hanqing Jin<sup>4</sup>, Zhaoxu Hou<sup>4</sup> and Wei E. Huang<sup>1\*</sup>*

1. Department of Engineering Science, University of Oxford, Begbroke Science Park, Woodstock Road, Oxford, OX5 1PF, United Kingdom.
2. Nuffield Department of Women's and Reproductive Health, University of Oxford, the Women Centre, John Radcliffe Hospital, Headley Way, Headington, Oxford, OX3 9DU, United Kingdom
3. Institute of Cellular Medicine, Newcastle University, Newcastle Upon-Tyne, NE2 4HH, United Kingdom
4. Mathematical Institute, University of Oxford, Andrew Wiles Building, Radcliffe Observatory Quarter, Woodstock Road, Oxford, OX2 6GG, United Kingdom

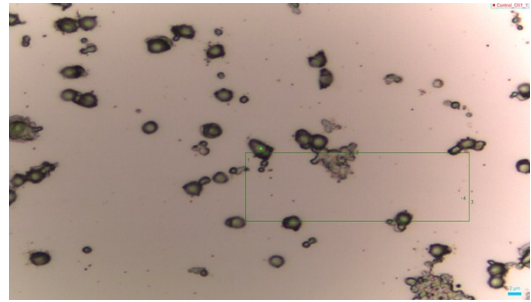
\*Corresponding author: Wei E. Huang

[wei.huang@eng.ox.ac.uk](mailto:wei.huang@eng.ox.ac.uk)

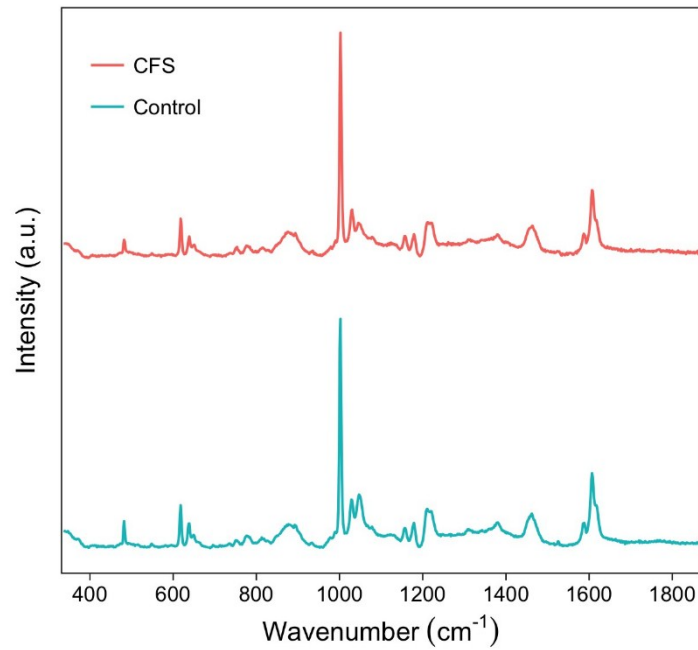
Telephone: +44 (0)1865 283786, Fax: +44 (0)1865 3749



(A)



(B)



(C)

**Figure S1.** There were two types of cells in PBMCs, large cells (A) and small cells (B). Representative SCRS of the subpopulation of PBMCs consisting of smaller cells from CFS patients and healthy controls (C). There was no difference in these type of cells in PBMCs between patient and healthy controls, only the large cells in the PBMC fraction have significant difference (Fig. 4).