## SUPPLEMENTARY MATERIALS

## Diversity among endothelial cell lines revealed by Raman and Fouriertransform infrared spectroscopic imaging

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Fig. S1. Representative cluster analysis of control EA.hy926 cell. Cluster analysis image (KMCA, Manhattan distance, Ward's algorithm) shows 5 classes: violet – lipid droplets; blue – nucleus; green – endoplasmic reticulum; orange – cytoplasm with all suspended small organelles, brown – cell membrane) and the respective average Raman spectra of main classes. All spectra were maximally extended in the y-axis. Scale bar equal 5  $\mu$ m.



Fig. S2. Comparison of Raman spectral profiles of endothelial cell lines. (A) Averaged Raman spectra averaged over all measurements with a standard deviation at each point (marked by the gray area) of EA.hy926 (blue spectrum), HAoEC (green spectrum) and HMEC-1 (red spectrum) endothelial cells. Spectra were normalized in the range 1500-400 cm<sup>-1</sup> and extended. (B) The spectral range of 1530-1150 cm<sup>-1</sup> and (C) 1150-700 cm<sup>-1</sup> was enlarged to visualize differences in intensities of bands at 1450, 1318, 1096, 1005 and 785 cm<sup>-1</sup>.