

## Supplementary Information Bluecher, Zilberfain et al.

**Figure S1**: **a)** PCA of the SNV normalized spectra of LDs, mitochondria and ER extracted from single MDA-MB-231 cells which were incubated with basal medium,  $ACM_{<30}$  and  $ACM_{>40}$ . The separation of the cell populations occurs gradually from basal medium over  $ACM_{<30}$  to  $ACM_{>40}$  along PC 1, which is displayed in the loading plots below. **b)** PCA of the SNV normalized spectra of LDs, mitochondria and ER extracted from breast cancer cells incubated with basal medium and  $ACM_{<30}$ . The cell populations are separated in the score plot along PC 1, which is displayed in the loading plots below. ( $\delta$ , deformation; v, stretching;  $\tau$  - twisting; I – lipids; p – proteins, pyr – pyrrole rings of porphyrin in cytochrome)