

Supplementary

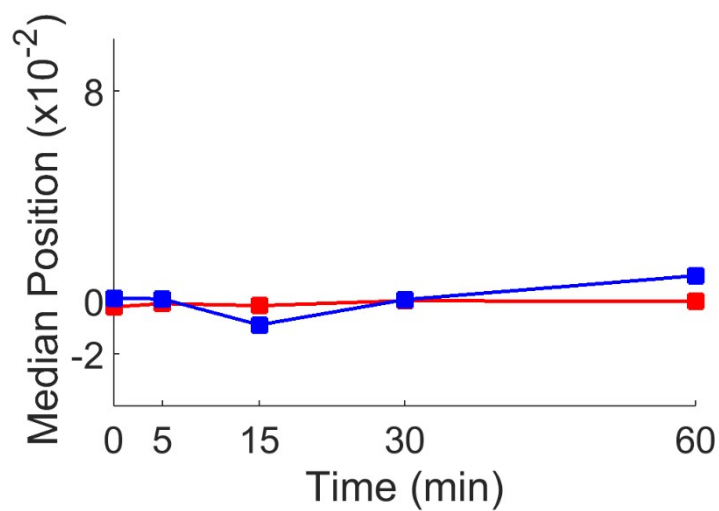


Figure S1 PCA scores median cluster position plots of FTIR spectra, examining the C=O stretch between 1720 cm⁻¹ – 1750 cm⁻¹ from PC-3 cells lines treated with cyclodextrin only (blue) and COX-2 inhibited treated with cyclodextrin (red)

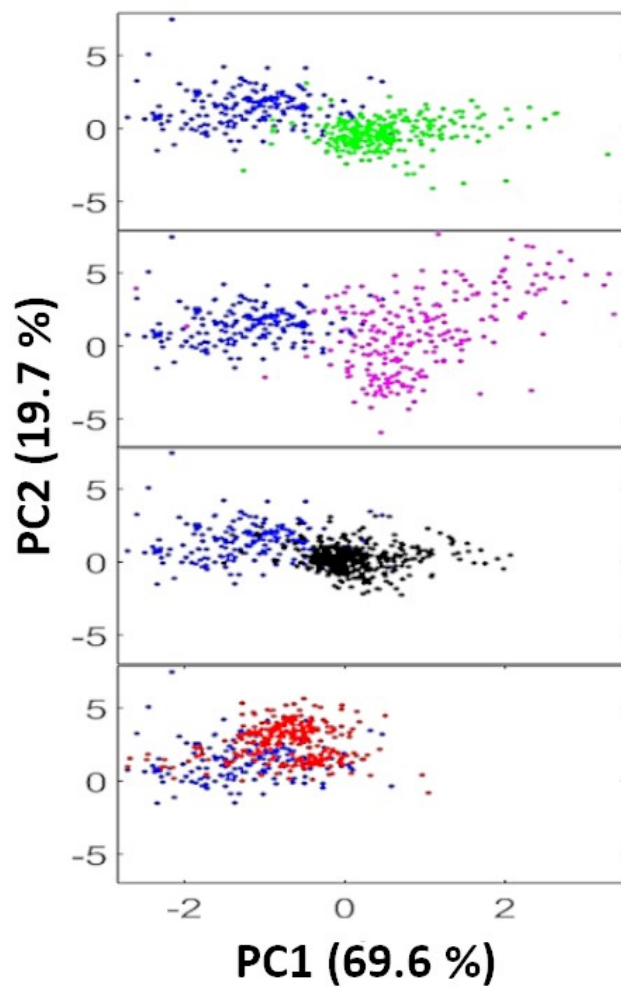


Figure S2. PCA scores of FTIR spectra, examining the C=O stretch between 1720 cm^{-1} – 1750 cm^{-1} for the invasive cell line LNCaP C4-2B treated with AA at time points (a) t=0 min (blue) vs t=5 min (green) and (b) t=0 min (blue) vs t=15 min (magenta) and (c) t=0 min (blue) vs t=30 min (black) and (d) t=0 min (blue) vs t=60 min (red).

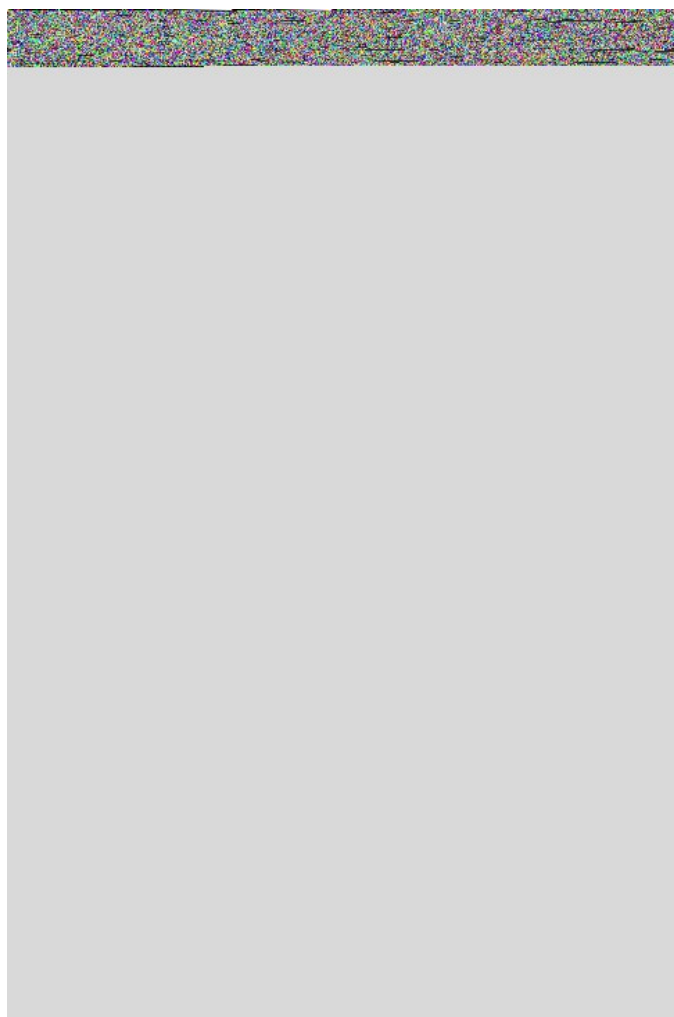


Figure S3. PCA scores of FTIR spectra, examining the C=O stretch between 1720 cm^{-1} – 1750 cm^{-1} for the invasive cell line LNCaP C4-2 treated with AA at time points (a) $t=0$ min (blue) vs $t=5$ min (green) and (b) $t=0$ min (blue) vs $t=15$ min (magenta) and (c) $t=0$ min (blue) vs $t=30$ min (black) and (d) $t=0$ min (blue) vs $t=60$ min (red).

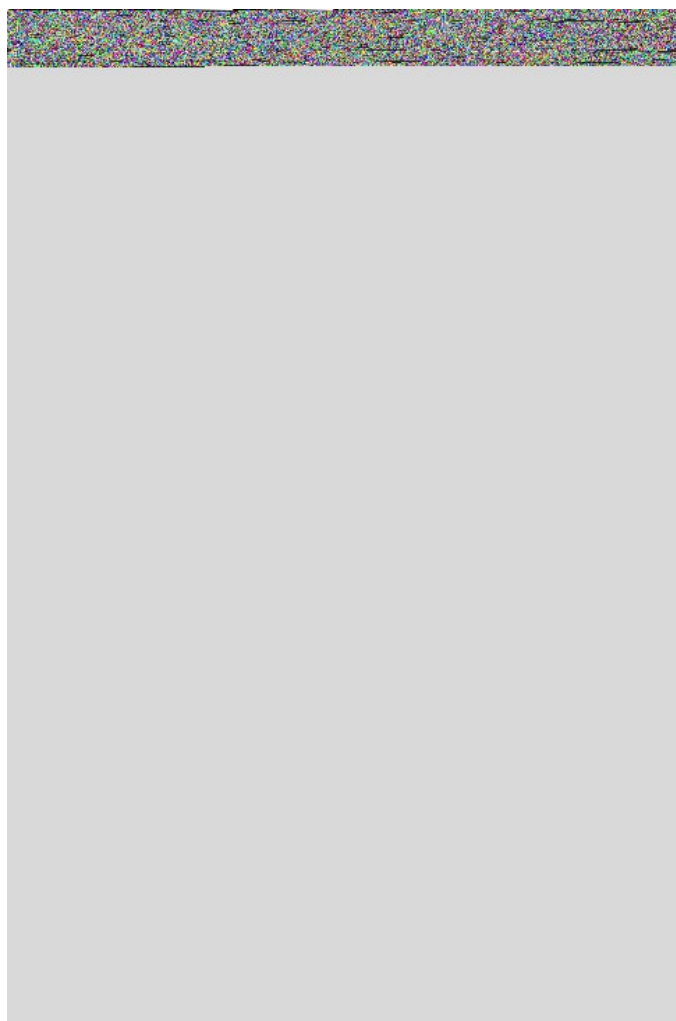


Figure S4. PCA scores of FTIR spectra, examining the C=O stretch between $1720\text{ cm}^{-1} - 1750\text{ cm}^{-1}$ for the invasive cell line DU-145 treated with AA at time points (a) $t=0\text{ min}$ (blue) vs $t=5\text{ min}$ (green) and (b) $t=0\text{ min}$ (blue) vs $t=15\text{ min}$ (magenta) and (c) $t=0\text{ min}$ (blue) vs $t=30\text{ min}$ (black) and (d) $t=0\text{ min}$ (blue) vs $t=60\text{ min}$ (red).

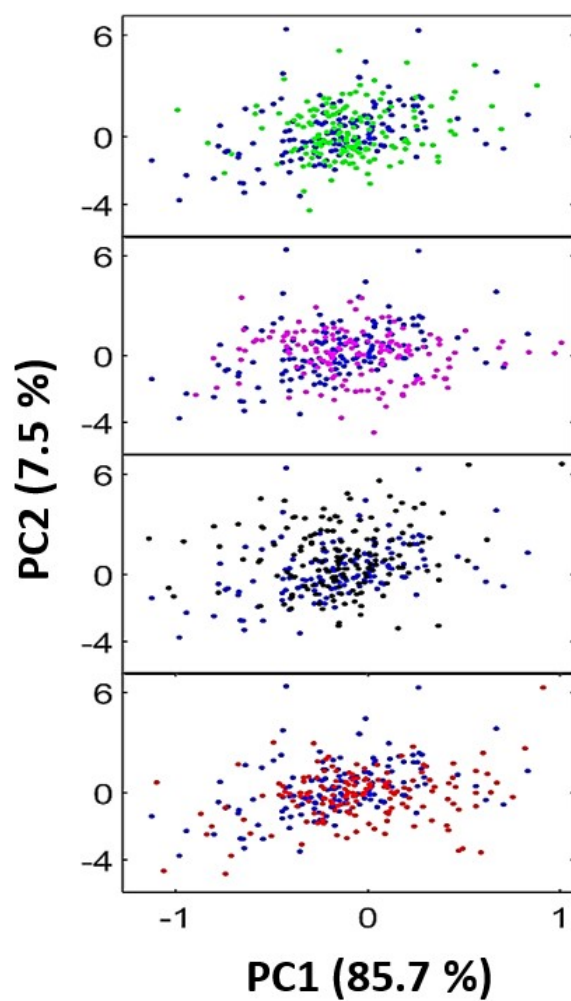


Figure S5. PCA scores of FTIR spectra, examining the C=O stretch between 1720 cm^{-1} – 1750 cm^{-1} for the non-invasive cell line PNT2 treated with AA at time points (a) t=0 min (blue) vs t=5 min (green) and (b) t=0 min (blue) vs t=15 min (magenta) and (c) t=0 min (blue) vs t=30 min (black) and (d) t=0 min (blue) vs t=60 min (red).

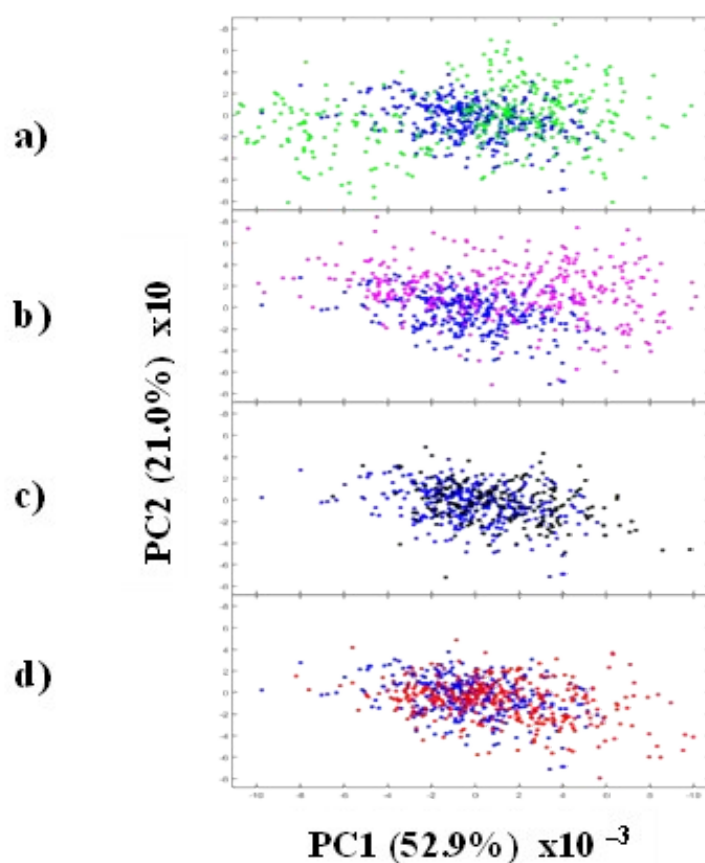


Figure S6. PCA scores of FTIR spectra, examining the C=O stretch between 1720 cm^{-1} – 1750 cm^{-1} for the non-invasive cell line LNCaP treated with AA at time points (a) $t=0$ min (blue) vs $t=5$ min (green) and (b) $t=0$ min (blue) vs $t=15$ min (magenta) and (c) $t=0$ min (blue) vs $t=30$ min (black) and (d) $t=0$ min (blue) vs $t=60$ min (red).

Table S1 Scratch assay data for PC-3 cells treated with AA

PC-3 Treated with AA				
Scratch	Average Width Before Treatment	Average Width After Treatment	Migration Index	Percentage Closure (%)
1	453.7	182.7	271.0	59.7
2	416.2	205.1	211.1	50.7
3	408.4	225.3	183.1	44.8
4	416.3	214.3	202.0	48.5

Table S2 Scratch assay data for PC-3 cells treated with AA and COX-2 inhibited

PC-3 COX-2 Inhibited Treated with AA				
Scratch	Average Width Before Treatment	Average Width After Treatment	Migration Index	Percentage Closure (%)
1	359.9	332.1	27.8	7.7
2	186.7	171.8	14.8	7.9
3	365.6	334.5	31.1	8.5
4	186.5	164.2	22.2	11.9