Time-Resolved Pharmacological Studies using Automated, On-line Monitoring of Five Parallel Suspension Cultures

Ala A. Alhusban Michael C. Breadmore, Nuri Gueven, Rosanne M. Guijt

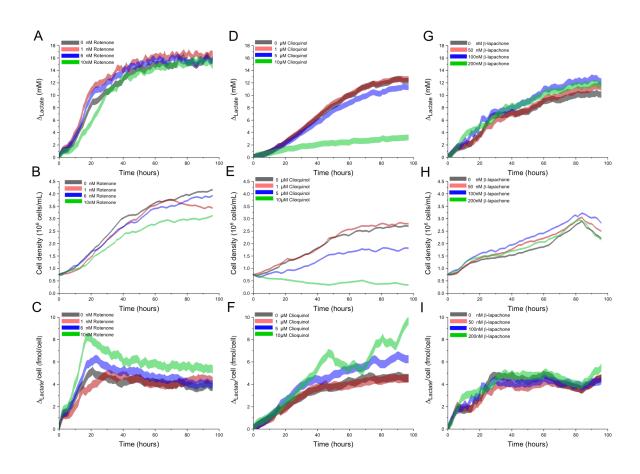


Figure SI-1 Monitoring of 5 parallel Jurkat cell cultures over 4 days in the absence or presence of **Rotenone** (A, B and C), **Clioquinol** (D, E and F) and β -lapachone (G, H and I) (shown as lines with SD error-bar as colored bands).

1 nM, 6 nM, 10 nM of **rotenone** was added to individual cell cultures: Changes in lactate concentration (n=5), B: Changes in cell density (n=5), C: Changes in lactate concentrations standardized on cell density (n=5). Statistical significant differences, based on the rate of lactate production per cell per time, were obtained between 10 nM treatment and control (p < 0.001) and 6 nM treatment and control (p = 0.046), whereas no significant difference between 1 nM treatment and control (p = 0.413).

1 μ M, 5 μ M, 10 μ M of **clioquinol** was added to individual cell cultures D: Changes in lactate levels over time (n=5), E: Changes in cell density (n=5), F: Changes in lactate concentrations standardized on cell density (n=5), statistical significant differences, based on the rate of lactate production per cell per time were obtained between 10 μ M treatment and control (p < 0.001) and 5 μ M treatment and control whereas no significant difference was found between 1 μ M and control.

50 nM, 100 nM, 200 nM of β -lapachone was added to individual cell cultures G: Changes in lactate levels over time (n=5), H: Changes in cell density (n=5), I: Changes in lactate concentrations standardized on cell density (n=5), no significant differences were found between treatments and control based on the rate of lactate production per cell per time, using one way ANOVA test.