

Supplementary Figure 1. Changes in ATP and lactate in proliferating and differentiated retinas after oxidative phosphorylation and glycolysis inhibitors. (a) ATP at different time points after NaN3 addition *in vivo*, normalised to control levels (P, n=4-25 per time point; D, n=4). (b) ATP at different time points after NaN3 addition in explants in MBS, normalised to control levels (P, n=4-16 per time point; D, n=4). (c) ATP normalised to control levels in freshly dissected explants in MBS with Antimycin A (P, n=13, p=0.003; D, n=13, p=10-6 compared to control; p=4x10-6 drop in proliferating compared to differentiated cells). (d) ATP normalised to controls in freshly dissected explants in MBS with Oligomycin (t=10: P, n=5, p>0.05; D, n=5, p>0.05 compared to controls. t=20: P, n=10, p>0.05; D, n=9, p=0.002 compared to controls, and p=0.002 drop in proliferating compared to differentiated cells. t=30: P, n=12, p>0.05; D, n=14, p=2x10-6 compared to controls, p=10-6 drop in proliferating compared to differentiated cells. t=30: P, n=12, p>0.05; D, n=14, p=2x10-6 compared to controls, p=10-6 drop in proliferating compared to differentiated cells. t=30: P, n=12, p>0.05; D, n=4, p=2x10-6 compared to controls, p=10-6 drop in proliferating compared to differentiated cells. t=30: P, n=12, p>0.05; D, n=4, p=2x10-6 compared to controls, p=10-6 drop in proliferating compared to differentiated cells. t=30: P, n=12, p>0.05; D, n=4, p=2x10-6 compared to controls, p=10-6 drop in proliferating compared to differentiated cells. t=30: P, n=12, p>0.05; D, n=4, p=2x10-6 compared to controls, p=10-6 drop in proliferating compared to differentiated cells. (e) ATP levels in freshly explanted retinas incubated with 2-deoxy-D-glucose (2DG) and NaN3 in 1x MBS (p>0.05 for all conditions, control n=21, 2DG n=8, NaN3 n=5, 2DG + NaN3 n=8). (f) Intracellular lactate after 3 hours of incubation with 2DG (n=6, p>0.05). (g) ATP levels in freshly explanted retinas in L15, incubated with NaN3, GPI and 2DG (n=5, p<0.001 for GPI + NaN3 or 2DG + GPI