



Supplementary Figure S2 Spermatozoa from Donor 1 showed defective calcium response to progesterone, penetration into viscous media. Spermatozoa from the first semen sample produced by Donor 1 were defective in the Ca^{2+} influx induced by progesterone assay (**A**), and similarly showed an absence of response to progesterone in the penetration into a viscous medium (**D**). Hyperactivation (HA) was significantly higher after treatment with 4-aminopyridine (4-AP) (**B**, $P = 0.0112$). Spermatozoa from the second semen sample showed a normal Ca^{2+} influx induced by progesterone (**A**), but penetration into a viscous medium was not enhanced by progesterone (**E**). HA was significantly higher after treatment with 4-AP (**C**, $P < 0.001$).