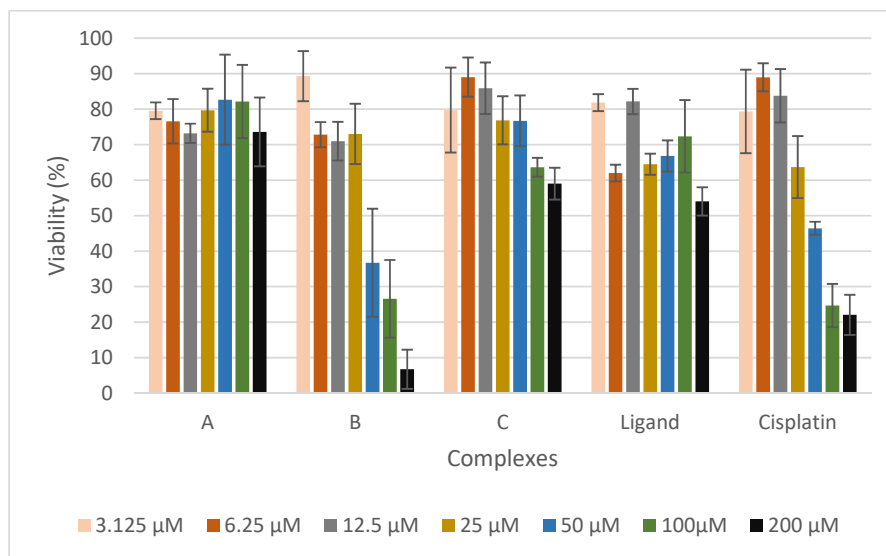
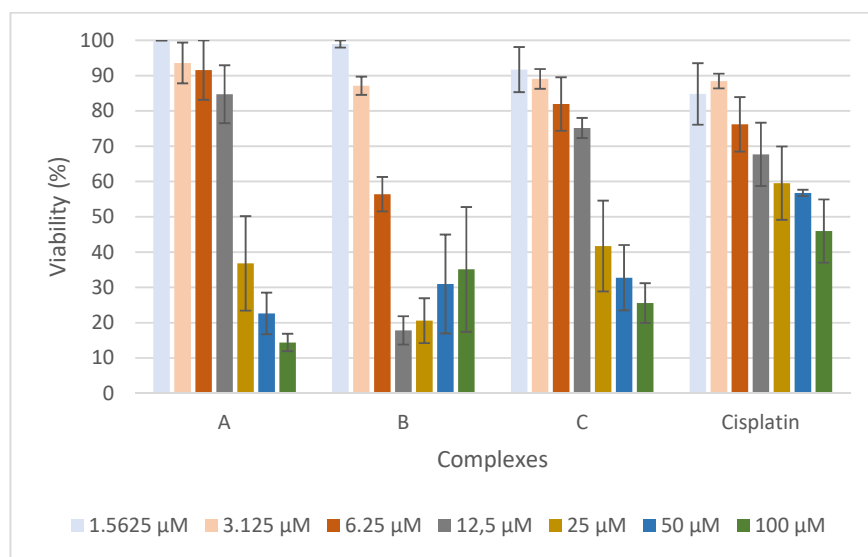


## Supplementary information

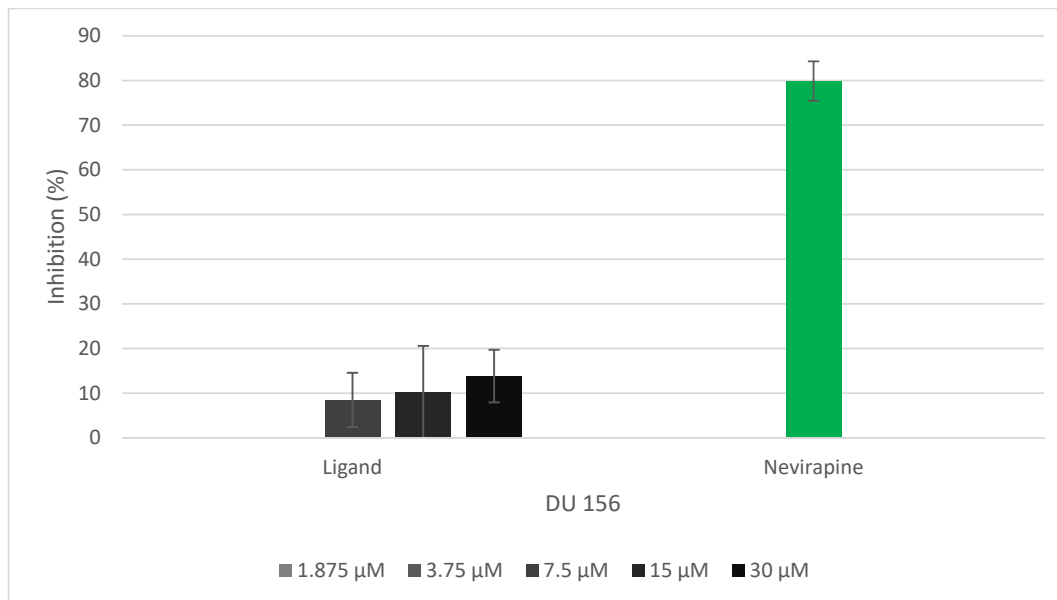
The viability of the complexes and ligand was analysed in TZM-bl cells and PBMCs (Figure S1 and S2). The ligand did not have viability values below 50% and was only analysed in TZM-bl cells, with this the  $CC_{50}$  value of the ligand is  $>200 \mu\text{M}$ .



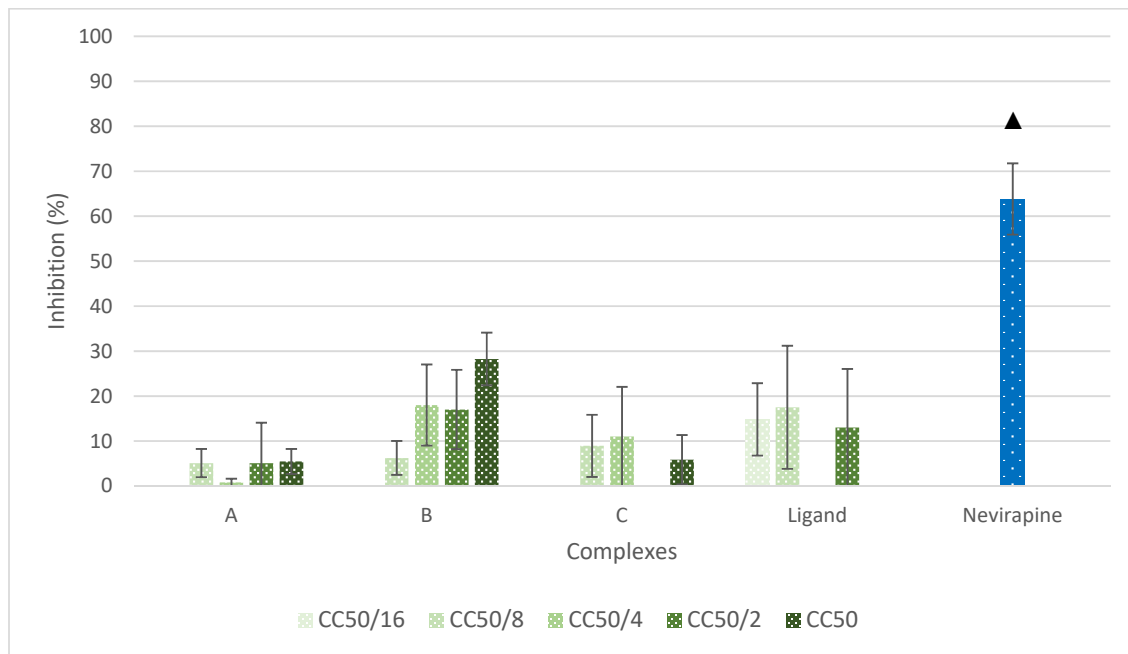
**Figure S1: The viability of the TZM-bl cells in the presence of the metal-based complexes, the ligand and Cisplatin as the positive control.** N-aryl-1H-1,2,3- triazole-based cyclometalated ruthenium-(II) complex (**A**), N-aryl-1H-1,2,3- triazole-based cyclometalated osmium-(II) complex (**C**) and the ligand were found to be non-toxic as the viability did not go below 50% at any of the analysed concentrations. N-aryl-1H-1,2,3- triazole-based cyclometalated iridium-(III) complex (**B**) was found to have a  $CC_{50}$  value of  $36.13 \pm 2.99 \mu\text{M}$  and Cisplatin was found to have a value of  $43.52 \pm 3.45 \mu\text{M}$ . The inhibition values were reported as the mean  $\pm$  SEM for  $n=3$ .



**Figure S2: The viability of PBMCs in the presence of the metal-based complexes and Cisplatin as the positive control.** All three the metal-based complexes were found to be more toxic than in TZM-bl cells. N-aryl-1H-1,2,3- triazole-based cyclometalated ruthenium-(II) complex (**A**) had a  $CC_{50}$  value of  $24.36 \pm 5.98 \mu\text{M}$ . N-aryl-1H-1,2,3- triazole-based cyclometalated Iridium-(III) complex (**B**) had a  $CC_{50}$  value of  $13.09 \pm 3.18 \mu\text{M}$ . N-aryl-1H-1,2,3- triazole-based cyclometalated osmium-(II) complex (**C**) had a  $CC_{50}$  value of  $29.16 \pm 8.03 \mu\text{M}$ . The control Cisplatin had a  $CC_{50}$  value of  $49.09 \pm 3.26 \mu\text{M}$ . The inhibition values are reported as mean  $\pm$  SEM for  $n=3$ .



**Figure S3: The percentage inhibition of the pseudo-virus Du 156.** Inhibition of Du 156 following the treatment of the ligand at similar concentrations to the complexes. The inhibition values reported as mean  $\pm$  SEM for  $n = 3$ .



**Figure S4: Luciferase inhibition of the complexes and the ligand.** Luciferase inhibition of the complexes as well as the ligand with Nevirapine as control ( $\blacktriangle$  pre-treated to prevent production of luciferase). The same concentrations were analysed as with the luciferase reporter gene assay, starting with a serial dilution from the  $CC_{50}$  values of the PBMCs. The inhibition of luciferase was found not to be statistically significant when comparing the luciferase produced in pseudo-virus only infected cells to the pseudo-virus cells lysed and treated with the complexes. The inhibition values reported as mean  $\pm$  SEM for  $n = 3$ .