

3.5 Effect of GlcN on PRN *in situ* single-pass intestinal perfusion (SPIP)

As seen in **figure 3.22**, cimetidine, an enzyme inhibitor increased the BA of PRN whereas; rifampin, an enzyme inducer decreased PRN BA. For all conditions, the concentration of PRN increased in a time-dependent manner. The highest increase in PRN concentration of 286 ± 20 ng/ml was observed at 60 min. Administering PRN with the enzyme inducer rifampin decreased its BA and achieved the lowest concentration of 237 ± 60 ng/ml at 60 min. By contrast, administering PRN with the enzyme inhibitor cimetidine increased its BA and achieved a higher concentration of 511 ± 138 ng/ml at 60 min, however, such increase was not statistically significant. Meanwhile, combining PRN with GlcN significantly enhanced the BA of PRN by two-fold to reach 842 ± 150 ng/ml ($p < 0.05$).