



Figure 5.8 (a) Comparison of the drug plasma exposures ($\text{AUC}_{0-24\text{h}}$) in rats for compounds **17** and **18**. (b) The drug plasma exposures ($\text{AUC}_{0-24\text{h}}$) of compound **18** and its active metabolite **21** in rats on day 1 and day 7 upon bid dosing of **18** at 2000 mg kg^{-1} .

in the case of analog **19**, which displayed an EC_{50} of 7.8 nM (genotype 1a) with a cLogP of 2.5. Therefore, C5-cyclopropyl was introduced on all subsequent analogs.

The impressive replicon activity achieved by the addition of the oxazolidinone substituent (e.g. **17–19**) suggested that a hydrogen-bond acceptor in this portion of the molecule might serve as an important pharmacophore. *In silico* modeling guided the design of other amine tail fragments aimed at preserving this structural feature. The structurally diverse analogs **23–25** were