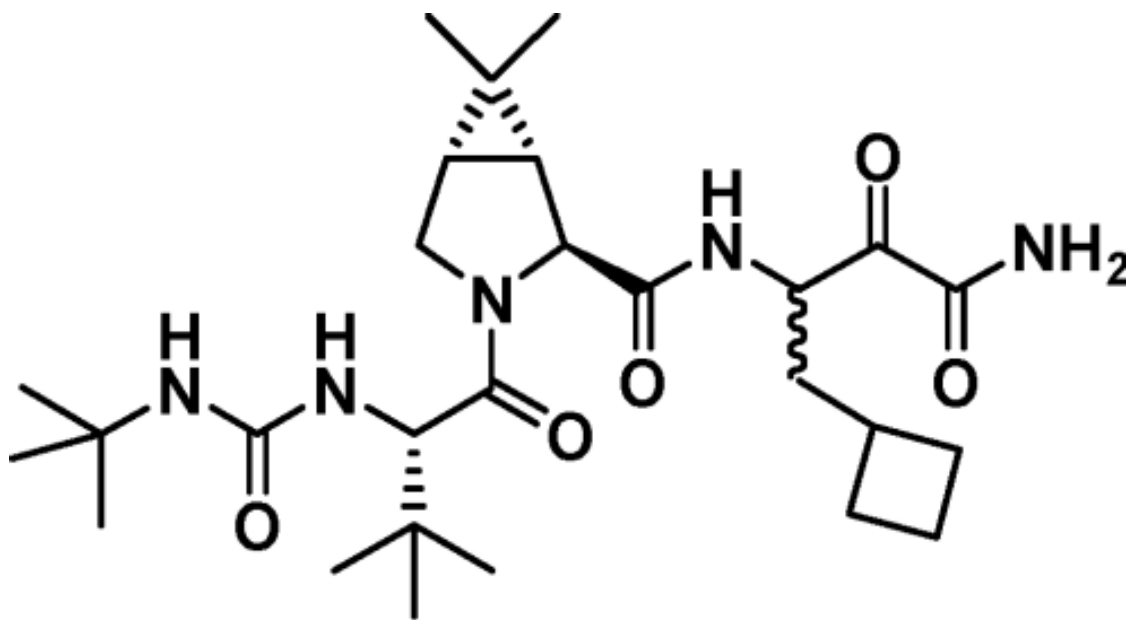


Functional Group Identification Homework Assignment

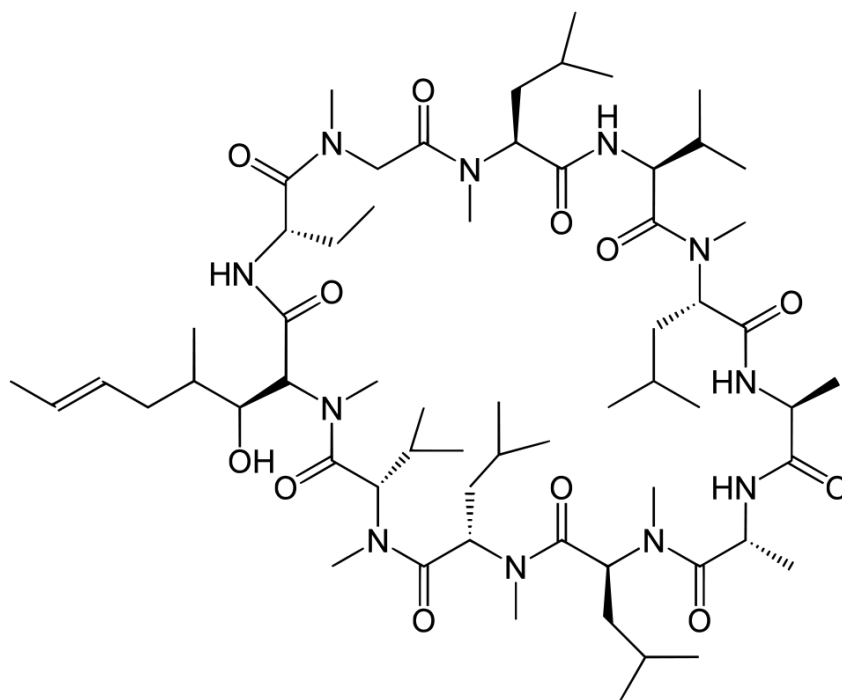
due Thurs. Sept. 9

1. Identify all major functional groups on Boceprevir. There are a total of 12; several groups appear multiple times and they are counted separately. This includes all heteroatom containing structures, all ring structures and all common name alkyl groups.



2. Separate the subunits of cyclosporine by drawing lines through all peptide (amide) bonds. Identify all common amino acids by their one letter abbreviation (e.g. G, A, V, etc.) and determine their stereochemistry (R or S). You may ignore N-methylated amides in this process. Identify all uncommon amino acids with a 'U' and determine their stereochemistry (R or S).

Cyclosporin



3. Identify all functional groups in FK-506. You do not need to identify alkyl groups, but you should identify all oxygen containing functional groups, all ring structures and alkenes. There are 15 total functional groups.

FK-506 (Tacrolimus)

