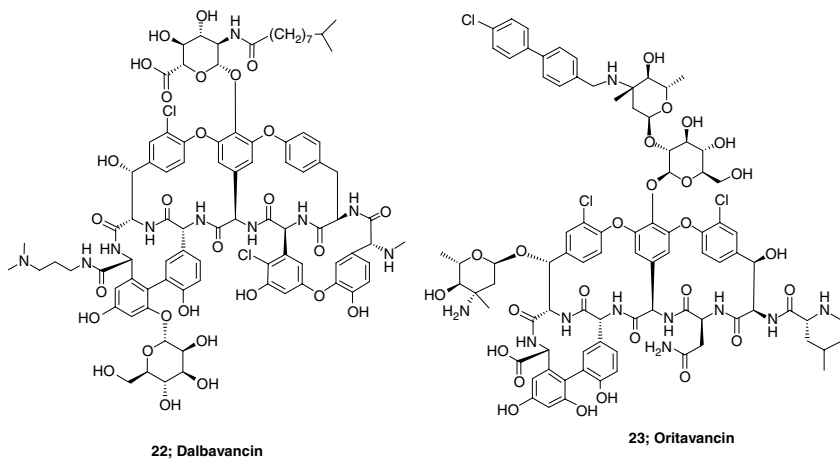


20; Vancomycin,  $R^1 = NH_2$     24; Boger  $R^1 = HN$ -[4-chlorophenyl]-[4-chlorophenyl]  
 20; Vancomycin,  $R^2 = O$     24; Boger  $R^2 = H_2$   
 20; Vancomycin,  $R^3 = OH$     24; Boger  $R^3 = -NH(CH_2)_3N(CH_3)_3^+$



22; Dalbavancin

23; Oritavancin

### 14.3.7 Host Defense Peptides

#### 14.3.7.1 Magainins and Derivatives

The peptidic molecules in the previous sections do not include peptides such as the magainins. Linear peptides using L amino acids with the base molecule shown in structure (25) and their descendants. These are part of a vast number of “host defense peptides” that all vertebrate animals secrete as cationic peptides, usually around 20–35 residues of regular amino acids that attack “microbial invaders.” The history of the frog-derived peptides known as