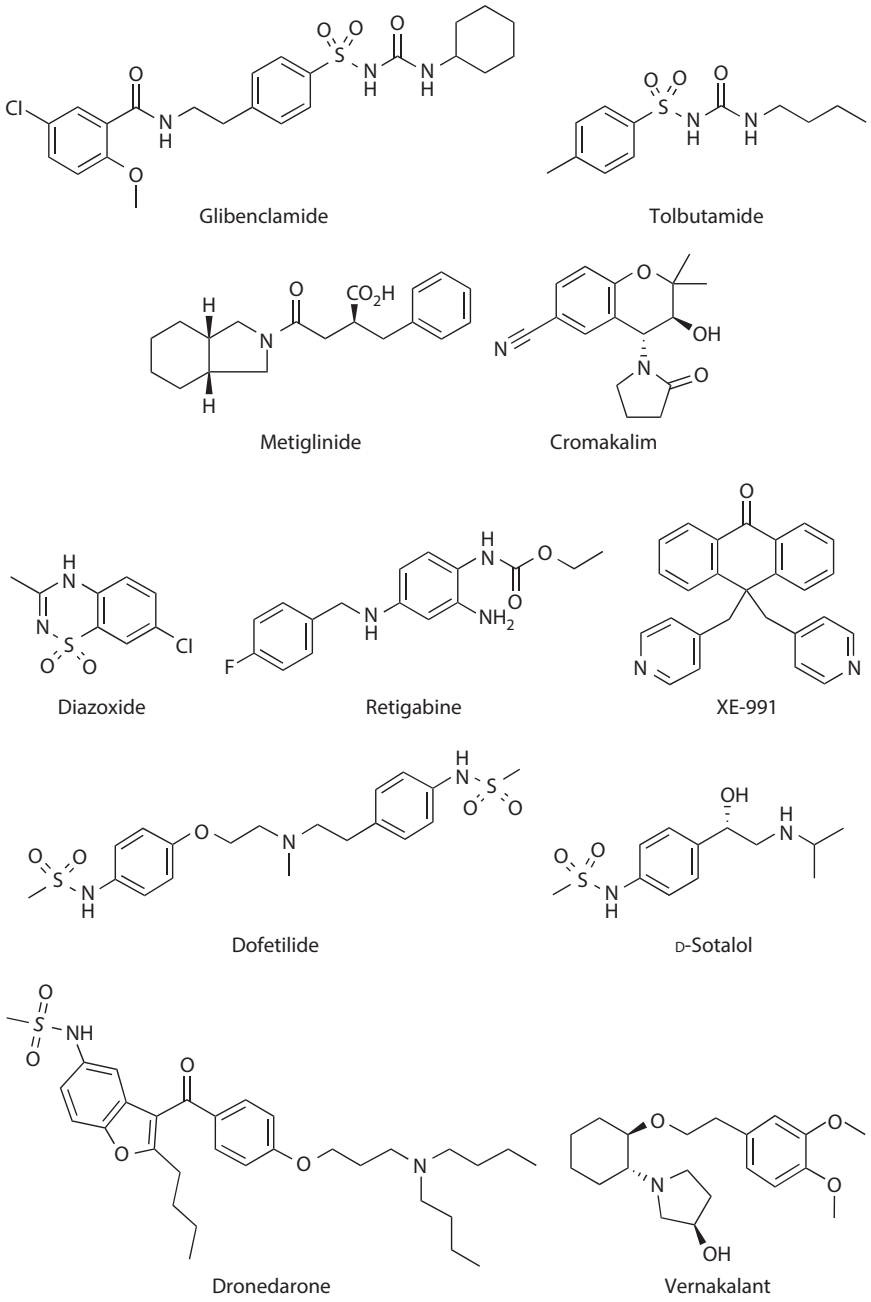

FIGURE 13.6 Structures of the K_{ATP} channel blockers glibenclamide, tolbutamide, and metiglinide; the K_{ATP} channel openers cromakalim and diazoxide; the K_V7 channel opener retigabine; the K_V7 channel blocker XE-991; the K_V11 channel blockers dofetilide and D-sotalol; the multichannel blockers dronedarone and vernakalant.

anti-arrhythmic effects in some patients whereas they are pro-arrhythmic in others. The reason for the latter is that although the prolongation of the AP may terminate some arrhythmias, then blocking an important cardiac K^+ conductance being responsible for repolarizing the AP may destabilize the heart against triggered impulses (afterdepolarizations). In 2009 and 2012, two multi-channel blockers (dronedarone and vernakalant) were approved for the treatment of atrial fibrillation.