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FACT BOOK



Once-A-Day  **atacand**<sup>®</sup>  
CANDESARTAN CILEXETIL

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### Chemical Properties

- a. Describe any structural similarities of the drug to other available compounds or groups of compounds. Describe any structural differences and their consequences when compared to these other compounds.

Candesartan cilexetil, a prodrug, is hydrolyzed to candesartan during absorption from the gastrointestinal tract. Candesartan is a selective AT<sub>1</sub> subtype angiotensin II receptor antagonist.

Candesartan cilexetil, a nonpeptide, is chemically described as (±)-1-[[[(cyclohexyloxy)carbonyloxy]ethyl 2-ethoxy-1-[[2'-(1H-tetrazol-5-yl)[1,1'-biphenyl]-4-yl]methyl]-1H-benzimidazole-7-carboxylate. Its empirical formula is C<sub>33</sub>H<sub>36</sub>N<sub>6</sub>O<sub>6</sub>. Its molecular weight is 610.67.

Candesartan cilexetil is a racemic mixture containing one chiral center at the cyclohexyloxycarbonyloxy ethyl ester group. Following oral administration, candesartan cilexetil undergoes hydrolysis at the ester link to form the active drug, candesartan, which is achiral. Its structural formula is:

