

Candesartan is 10000 times more selective for AT1 than AT2, but AT2 is not known to be associated with cardiovascular homeostasis(Kirk, J. K.*et al.*. 1999). Inhibition of aldosterone secretion may increase sodium and water excretion while decreasing potassium excretion. (Gasarin E, *et al.*. 2013).

candesartan does not inhibit ACE (kininase II), and so it does not affect the bradykinin levels. Blockade of the angiotensin II receptor inhibits the negative regulatory feedback of angiotensin II on renin secretion, but the resulting increased plasma renin activity and angiotensin II circulating levels do not overcome the effect of candesartan on blood pressure. (Husain A, Azim, *et al.*. 2011).

### **1.3.3 Indication and Clinical use**

Candesartan is indicated for:

#### **Hypertension**

Candesartan cilexetil is indicated for the treatment of hypertension in adults and children 1 to < 17 years of age. It may be used alone or in combination with other antihypertensive agents. . (Karlson BW, *et al.*. 2009).

It may be used as a first line agent to treat uncomplicated hypertension, isolated systolic hypertension and left ventricular hypertrophy., candesartan is also used for patient with diabetic nephropathy, it slows the progression of nephropathy by reducing albuminuria.( Hovind P, 2001; Hovind P, 2004).

#### **Heart Failure**

Candesartan cilexetil is indicated for the treatment of heart failure (NYHA class II-IV) in adults with left ventricular systolic dysfunction (ejection fraction  $\leq$  40%),