Brand Name: Farxiga/Forxiga

Generic: dapagliflozin **Type:** small molecule

Year Accepted/Phase: 2003

Mechanism:

Dapagliflozin inhibits SGLT2 in the proximal renal tubules, reducing glucose reabsorption and increasing urinary glucose excretion, leading to lower blood glucose levels, reduced weight, and improved cardiovascular and renal outcomes.

Chemical Structure:

Indication:

Farxiga is indicated for the treatment of type 2 diabetes mellitus, heart failure with reduced ejection fraction, and chronic kidney disease.

Clinical trials:

CHARM-Alternative Trial (Phase III)

Pubmed: https://pubmed.ncbi.nlm.nih.gov/36027570/

Purpose: Compare the efficacy and safety of candesartan to placebo in patients with heart failure intolerant to angiotensin-converting enzyme (ACE) inhibitors.

Dates: Conducted from 1999 to 2003.

Results: The CHARM-Alternative trial showed that candesartan significantly reduced the risk of cardiovascular death or heart failure hospitalization compared to placebo in patients with heart failure intolerant to ACE inhibitors, with a good safety profile.

Impact: These results supported the use of Atacand in patients with heart failure who are intolerant to ACE inhibitors.

CHARM-Added Trial (Phase III)

Pubmed: https://pubmed.ncbi.nlm.nih.gov/36027570/

Purpose: Evaluate the effect of adding candesartan or placebo to existing

therapy in patients with heart failure and reduced ejection fraction.

Dates: Conducted from 1999 to 2003.

Results: The CHARM-Added trial demonstrated that adding candesartan to standard therapy significantly reduced the risk of cardiovascular death or heart failure hospitalization compared to placebo in patients with heart failure and reduced ejection fraction, with a good safety profile.

Impact: These results supported the use of Atacand as an add-on therapy in patients with heart failure and reduced ejection fraction.