

Brand Name: XIGDUO XR

Generic: dapagliflozin and metformin hydrochloride extended-release

Type: small molecule

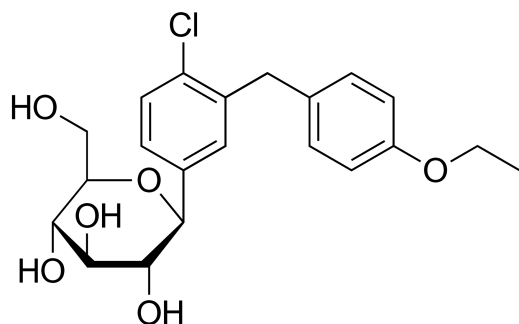
Year Accepted/Phase: 2014

Mechanism:

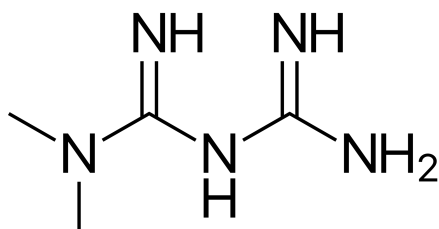
Dapagliflozin inhibits SGLT2 in the proximal renal tubules, reducing reabsorption of glucose and increasing urinary glucose excretion. Metformin decreases hepatic glucose production and improves insulin sensitivity.

Chemical Structure:

Dapagliflozin



Metformin



Indication:

XIGDUO XR is indicated as an adjunct to diet and exercise to improve glycemic control in adults with type 2 diabetes mellitus when treatment with both dapagliflozin and metformin is appropriate.

Clinical trials:

Pubmed: <https://pubmed.ncbi.nlm.nih.gov/22413962/>

Purpose: Evaluate the efficacy and safety of dapagliflozin and metformin extended-release as a combination therapy for type 2 diabetes.

Dates: Clinical trials were conducted over several years, with the first trials starting in the early 2010s.

Results: These trials demonstrated that the combination of dapagliflozin and metformin extended-release was more effective in lowering blood glucose levels compared to either drug alone. The combination therapy also showed benefits in terms of weight loss and blood pressure reduction.

Impact: The positive results from these trials supported the approval of XIGDUO XR for the treatment of type 2 diabetes.