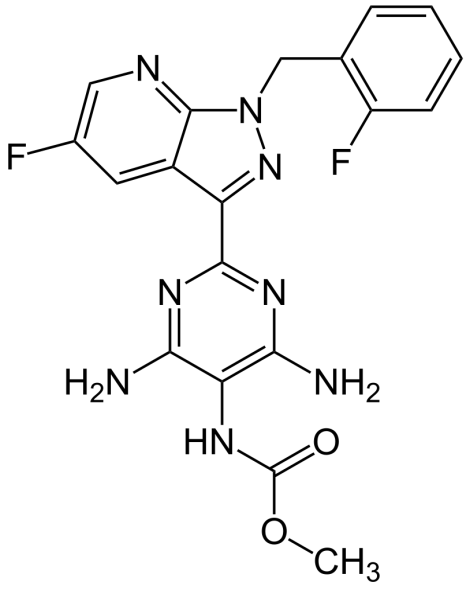
Brand Name: Verquvo
Generic: vericiguat
Type: small molecule
Year Accepted/Phase: 2021

Mechanism:

Vericiguat works by stimulating soluble guanylate cyclase (sGC), an enzyme in the nitric oxide (NO) signaling pathway. This leads to increased production of cyclic guanosine monophosphate (cGMP), which helps relax blood vessels, reduce cardiac load, and improve cardiac function.

Chemical Structure:



Indication:

Verquvo is indicated to reduce the risk of cardiovascular death and heart failure hospitalization following a hospitalization for heart failure or need for outpatient intravenous diuretics, in adults with symptomatic chronic heart failure and ejection fraction less than 45%.

Clinical trials:

VICTORIA Trial (Phase III)
Pubmed: https://pubmed.ncbi.nlm.nih.gov/37754817/
Purpose: Evaluate the efficacy and safety of vericiguat in patients with chronic heart failure and reduced ejection fraction who have experienced a recent worsening heart failure event.
Dates: Conducted from 2016 to 2019.
Results: The VICTORIA trial demonstrated that vericiguat significantly reduced the composite endpoint of cardiovascular death or heart failure hospitalization compared to placebo. The primary outcome occurred in 35.5% of patients in the vericiguat group versus 38.5% in the placebo group. The hazard ratio for the primary outcome was 0.90 (95% CI, 0.82 to 0.98; P=0.02).
Impact: The results of the VICTORIA trial supported the approval of vericiguat for the treatment of patients with HFrEF who have experienced a recent worsening event, offering a new therapeutic option to reduce the risk of cardiovascular death and hospitalization for heart failure.