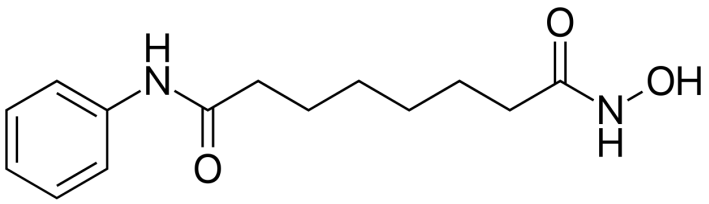
Brand Name: Zolinza
Generic: vorinostat
Type: small molecule
Year Accepted/Phase: 2006

Mechanism:

Vorinostat inhibits histone deacetylases, leading to the accumulation of acetylated histones and other proteins, which can induce cell cycle arrest, differentiation, and apoptosis in cancer cells.

Chemical Structure:



Indication:

Zolinza is indicated for the treatment of cutaneous manifestations in patients with CTCL who have progressive, persistent, or recurrent disease on or following two systemic therapies.

Clinical trials:

Phase II Trial: NCI-00095853
Pubmed: https://pubmed.ncbi.nlm.nih.gov/17594194/
Purpose: Evaluate the efficacy and safety of vorinostat in patients with refractory or persistent cutaneous T-cell lymphoma (CTCL).
Dates: Conducted from 2001 to 2004.
Results: The trial showed that vorinostat produced a significant clinical response in patients with CTCL. Approximately 30% of patients achieved a partial response, and 1% achieved a complete response. The median time to progression was around 4 months.
Impact: This study provided critical data supporting the use of vorinostat in treating CTCL and led to further investigations into its efficacy and safety.

Phase IIb Trial: Zolinza-014
Pubmed: https://pubmed.ncbi.nlm.nih.gov/17594194/
Purpose: Confirm the efficacy and safety of vorinostat in patients with advanced CTCL who had failed at least two systemic therapies.
Dates: Conducted from 2004 to 2006.
Results: The trial confirmed the efficacy of vorinostat, with an overall response rate of approximately 30%, similar to earlier trials. The median duration of response was around 6 months.
Impact: The results of this trial were pivotal in securing FDA approval for vorinostat for the treatment of CTCL.