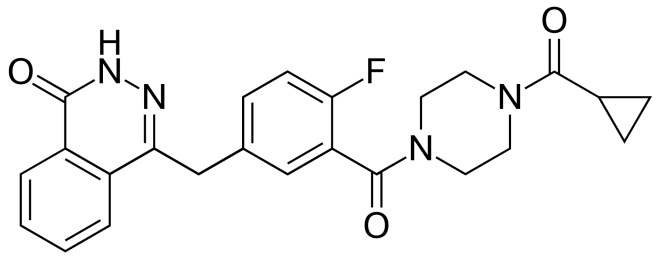
Brand Name: Lumoxiti
Generic: moxetumomab pasudotox-tdfk
Type: small molecule
Year Accepted/Phase: 2004

Mechanism:

Moxetumomab pasudotox is a CD22-directed cytotoxin that binds to CD22 on the surface of B cells, delivering a cytotoxic agent to the cell and causing cell death.

Chemical Structure:



Indication:

Lumoxiti is indicated for the treatment of adult patients with relapsed or refractory HCL who have received at least two prior systemic therapies, including treatment with a purine nucleoside analog.

Clinical trials:

Study 205 Trial (Phase III)
Pubmed: https://pubmed.ncbi.nlm.nih.gov/31134324/
Purpose: Evaluate the efficacy and safety of moxetumomab pasudotox in patients with relapsed or refractory HCL.
Dates: Conducted from 2013 to 2017.
Results: The Study 205 trial demonstrated that moxetumomab pasudotox achieved a high rate of durable complete response (CR) in patients with relapsed or refractory HCL, with a manageable safety profile.
Impact: These results supported the approval of Lumoxiti for the treatment of relapsed or refractory HCL in adult patients who have received at least two prior systemic therapies, including treatment with a purine nucleoside analog.

Study 104 Trial (Phase I)
Purpose: Evaluate the safety, pharmacokinetics, and preliminary efficacy of moxetumomab pasudotox in patients with relapsed or refractory HCL.
Dates: Conducted in the early 2000s.
Results: The Study 104 trial showed promising antitumor activity of moxetumomab pasudotox in patients with relapsed or refractory HCL, with manageable adverse events.
Impact: These results supported further development of Lumoxiti for the treatment of HCL.