

Brand Name: Polivy

Generic: polatuzumab vedotin

Type: monoclonal antibody

Year Accepted/Phase: 2019

Mechanism:

Polatuzumab binds to CD79b, expressed on the surface of B-cell lymphoma cells, delivering vedotin into the cell. Vedotin disrupts microtubule function, leading to cell cycle arrest and cell death.

Chemical Structure: N/A

Indication:

Polivy is indicated for use in combination with bendamustine and rituximab (BR) for the treatment of adult patients with relapsed or refractory DLBCL who have received at least two prior therapies.

Clinical trials:

GO29365 Trial

Pubmed: <https://pubmed.ncbi.nlm.nih.gov/31693429/>

Purpose: Evaluate the efficacy and safety of Polivy combined with bendamustine and rituximab (BR) versus BR alone in patients with relapsed or refractory diffuse large B-cell lymphoma (DLBCL).

Dates: Trials conducted from December 2014 to March 2019.

Results: Polivy combined with BR significantly improved overall response rates and progression-free survival compared to BR alone.

Impact: Led to the FDA approval of Polivy in June 2019 for the treatment of relapsed or refractory DLBCL.

POLARIX Trial (NCT03274492)

Pubmed: <https://pubmed.ncbi.nlm.nih.gov/34904799/>

Purpose: Compare the efficacy and safety of Polivy plus rituximab, cyclophosphamide, doxorubicin, and prednisone (pola-R-CHP) versus rituximab, cyclophosphamide, doxorubicin, vincristine, and prednisone (R-CHOP) in previously untreated DLBCL.

Dates: Trials conducted from September 2017 to August 2021.

Results: Pola-R-CHP was superior to R-CHOP in terms of progression-free survival.

Impact: Supported the use of Polivy as a first-line treatment option for DLBCL.

NCT02600897

Pubmed: <https://pubmed.ncbi.nlm.nih.gov/34826412/>

Purpose: Assess the safety, tolerability, and preliminary efficacy of Polivy in combination with other standard therapies in patients with relapsed or refractory non-Hodgkin lymphoma.

Dates: Trials conducted from November 2015 to June 2021.

Results: Established a favorable safety profile and showed promising efficacy of Polivy in combination with other agents.

Impact: Informed further studies and expanded use in various lymphoma subtypes.

NCT02257567

Pubmed: <https://pubmed.ncbi.nlm.nih.gov/31693429/>

Purpose: Evaluate the safety, pharmacokinetics, and preliminary efficacy of Polivy in combination with other therapies in patients with relapsed or refractory B-cell non-Hodgkin lymphoma.

Dates: Trials conducted from October 2014 to June 2018.

Results: Provided early evidence of the benefits of Polivy in combination therapies.

Impact: Supported subsequent phase II and III trials, contributing to the broader clinical application of Polivy in lymphoma treatment.