

About Polivy[®] (polatuzumab vedotin)

A first-in-class medicine for the treatment of certain types of blood cancers, including relapsed or refractory (R/R) diffuse large B-cell lymphoma (DLBCL)



R/R DLBCL: an aggressive disease with high unmet need

Lymphoma is the most common type of blood cancer, with two main forms: Hodgkin lymphoma and non-Hodgkin lymphoma (NHL). DLBCL is the most common type of NHL, accounting for about one in three cases.¹

150,000
people worldwide

are estimated to
be diagnosed with
DLBCL each year.²

DLBCL symptoms include:

- **Painless lumps**
(often in their neck, armpit or groin)
- **Night sweats**
- **Unexplained weight loss**
- **Loss of appetite**
- **Fatigue**

DLBCL affects a type of white blood cell called B-cells, and is aggressive and fast growing. Although DLBCL can occur at any age, it is generally more common in older adults, with most patients diagnosed aged 65 or over.³ It is also slightly more common in men than in women.³

A suspected diagnosis of DLBCL will be confirmed by testing tissue from a gland. This is known as a lymph node biopsy.

As many as

4 in 10

DLBCL patients
will not respond to
initial treatment

DLBCL is generally responsive to treatment, however it can advance quickly. As many as 4 in 10 patients will not respond to initial treatment – this is known as refractory disease – or will initially respond to treatment but then find the cancer growth has returned – a relapse.⁴

Effective treatment options for R/R DLBCL are limited which in turn impacts the rates of survival. An added complication is that many patients with R/R DLBCL will not be eligible for the standard of care treatments. This is generally due to age or comorbidities. These patients currently have very limited treatment options.

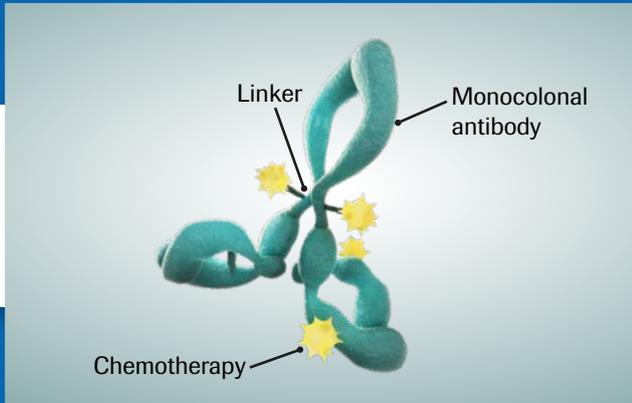
The greatest unmet need in DLBCL is for more effective treatment options that improve survival rates in this R/R patient population.

Antibody-drug conjugates (ADCs)

ADCs are cancer medicines that combine the targeting ability of antibodies with chemotherapies designed to destroy cancer cells.

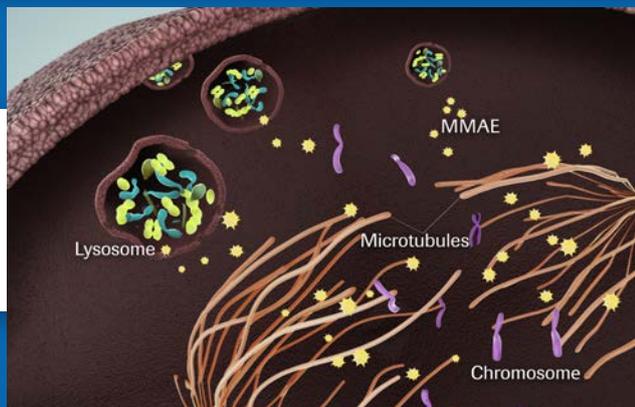
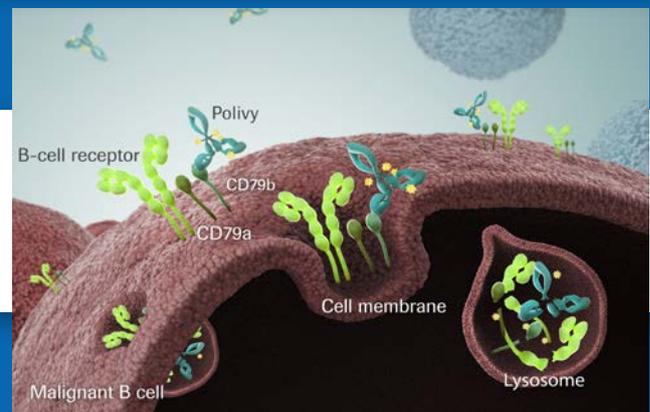
ADCs are designed to bind only to specific receptors on the surface of cells, and so they are highly targeted.⁵

Polivy: a first-in-class medicine



Polivy is a first-in-class anti-CD79b ADC currently being investigated for the treatment of several types of NHL.

Polivy is the only ADC targeted to CD79b, a protein that is expressed in the majority of B-cells, making it a promising target for the development of new therapies.^{6,7}



The monoclonal antibody element of Polivy binds to CD79b, triggering internalisation of the drug into the cells. The linker component of the ADC is designed to release the chemotherapy once it is internalised, causing the cell to be destroyed.

This process allows the medicine to be delivered directly to cancer cells, with the goal of minimising the effects on normal cells.^{5,8}



References

- ¹ Lyon, France: IARC Press; 2008. World Health Organization Classification of Tumors of Haematopoietic and Lymphoid Tissues.
- ² Numbers derived from GLOBOCAN 2018: Estimated cancer incidence, mortality and prevalence worldwide in 2018. [Internet; cited 2019 July]. Available from: <http://globocan.iarc.fr>.
- ³ Lymphoma Action. Diffuse large B-cell lymphoma. [Internet; cited 2019 July]. Available from: <https://lymphoma-action.org.uk/types-lymphoma-non-hodgkin-lymphoma/diffuse-large-b-cell-lymphoma>.
- ⁴ Maurer, JM et al. Event-free survival at 24 months is a robust end point for disease-related outcome in diffuse large B-cell lymphoma treated with immunochemotherapy. *J Clin Oncol*. 2014; 32: 1066-73.
- ⁵ ADC Review. What are antibody-drug conjugates? [Internet; cited 2019 July]. Available from: <https://www.adcreview.com/the-review/what-are-antibody-drug-conjugates>
- ⁶ Dorman, D et al. Therapeutic potential of an anti-CD79b antibody-drug conjugate, anti-CD79b-vc-MMAE, for the treatment of non-Hodgkin lymphoma. *Blood*. 2009; 114(13): 2721-9.
- ⁷ Pfeifer M, et al. Anti-CD22 and anti-CD79B antibody drug conjugates are active in different molecular diffuse large B-cell lymphoma subtypes. *Leukemia* 2015; 29:1578-1586.
- ⁸ Ducry L, Stump B. Antibody-drug conjugates: linking cytotoxic payloads to monoclonal antibodies. *Bioconjug Chem*. 2010; 21:5-13.