

Putting NICE guidance into practice

Resource impact report: Polatuzumab vedotin in combination for untreated diffuse large B-cell lymphoma (TA874)

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Summary

NICE has recommended polatuzumab vedotin with rituximab, cyclophosphamide, doxorubicin and prednisolone (R-CHP) for untreated diffuse large B-cell lymphoma (DLBCL) in adults, only if

- they have an International Prognostic Index (IPI) score of 2 to 5
- the company provides it according to the commercial arrangement (see section 2 of guidance).

We estimate that:

- Around 1,800 people from year 2024/25 with untreated diffuse large B-cell lymphoma will be eligible from for treatment with polatuzumab vedotin with R-CHP each year after adjusting for population growth.
- Around 1,600 people will receive polatuzumab vedotin with R-CHP from year 2024/25 onwards once uptake has reached 90% after adjusting for population growth as shown in table 1.

Table 1 Estimated number of people in England receiving polatuzumab vedotin with R-CHP

	2023/24	2024/25	2025/26	2026/27	2027/28
Eligible population after adjusting for population growth	1,810	1,820	1,830	1,840	1,850
Uptake rate for polatuzumab vedotin with R-CHP (%)	75	90	90	90	90
Population receiving polatuzumab vedotin with R-CHP each year after adjusting for population growth	1,350	1,640	1,650	1,660	1,670

This report is supported by a local resource impact template because the list price of polatuzumab vedotin has a discount that is commercial in confidence.

The discounted price of polatuzumab vedotin can be put into the template and other variables may be amended.

This technology is commissioned by NHS England. Providers are NHS hospital trusts.

1 Polatuzumab vedotin

1.1 NICE has recommended polatuzumab vedotin with rituximab, cyclophosphamide, doxorubicin and prednisolone (R-CHP) for untreated diffuse large B-cell lymphoma (DLBCL) in adults, only if

- they have an International Prognostic Index (IPI) score of 2 to 5
- the company provides it according to the commercial arrangement (see section 2 of guidance).

1.2 This recommendation is not intended to affect treatment with polatuzumab vedotin with R-CHP that was started in the NHS before this guidance was published. People having treatment outside this recommendation may continue without change to the funding arrangements in place for them before this guidance was published, until they and their NHS clinician consider it appropriate to stop.

1.3 Standard treatment for untreated DLBCL is rituximab, cyclophosphamide, doxorubicin, vincristine and prednisolone (R-CHOP).

1.4 Clinical evidence suggests that people with an IPI score of 2 to 5 having polatuzumab vedotin with R-CHP have more time before their cancer gets worse than people having R-CHOP alone. It is not clear if polatuzumab vedotin with R-CHP increases how long people live compared with R-CHOP.

2 Resource impact of the guidance

2.1 We estimate that:

- Around 1,800 people from year 2024/25 with untreated diffuse large B-cell lymphoma will be eligible for treatment with polatuzumab vedotin with R-CHP each year after adjusting for population growth.

- Around 1,600 people will receive polatuzumab vedotin with R-CHP from year 2024/25 onwards once uptake has reached 90% after adjusting for population growth as shown in table 1.

2.2 The current treatment and future uptake figure assumptions are based on expert clinical opinion and are shown in the resource impact template. Table 2 shows the number of people in England who are estimated to receive polatuzumab vedotin with R-CHP by financial year.

Table 2 Estimated number of people receiving polatuzumab vedotin with R-CHP using NICE assumptions

	2023/24	2024/25	2025/26	2026/27	2027/28
Eligible population after adjusting for population growth	1,810	1,820	1,830	1,840	1,850
Uptake rate for polatuzumab vedotin with R-CHP (%)	75	90	90	90	90
Population receiving polatuzumab vedotin with R-CHP each year after adjusting for population growth	1,350	1,640	1,650	1,660	1,670

2.3 This report is supported by a local resource impact template. The company has a commercial arrangement (simple discount patient access scheme). This makes polatuzumab vedotin available to the NHS with a discount. The size of the discount is commercial in confidence. It is the company's responsibility to let relevant NHS organisations know details of the discount. The discounted price of polatuzumab vedotin can be put into the template and other variables may be amended.

3 Implications for commissioners

- 3.1 This technology is commissioned by NHS England. Providers are NHS hospital trusts.
- 3.2 The payment mechanism is determined by the responsible commissioner and depends on the technology being classified as high cost.
- 3.3 Polatuzumab vedotin falls within the programme budgeting category 02X Cancers & Tumours, Other.

4 How we estimated the resource impact

The population

- 4.1 Table 3 shows how the number of people eligible for and receiving treatment with polatuzumab vedotin with R-CHP each year was calculated.

Table 3 Number of people eligible for treatment in England

Population	Proportion of previous row (%)	Number of people
Total population		54,786,327
Adult population		43,108,471
Incidence of diffuse large B-cell lymphoma (DLBCL) ¹	0.0094%	4,360
People with International Prognostic Index (IPI) score 2-5 ²	66%	2,880
People with CD20-positive DLBC ³	98%	2,820
People suitable for treatment ⁴	90%	2,540
People choosing R-CHOP with curative intent ²	73%	1,850
Total number of people eligible for treatment with polatuzumab vedotin with R-CHP		1,850
Total number of people estimated to receive polatuzumab vedotin with R-CHP each year from year 2 ⁴	90%	1,670
¹ Source: NHS Digital, Cancer registration statistics, England, 2020. ICD-10 code C83.3. 4186 (4184 ages 20 years and over plus 2 assumed from 13 aged 15-19 years). Applied to baseline adult population ² Source: Ruppert AS, Dixon JG, Salles G et al (2020), International prognostic indices in diffuse large B-cell lymphoma: a comparison of IPI, R-IPI, and NCCN-IPI. Blood, volume 135, issue 23 June 2020. ³ Source: Katchi T and Liu D (2017), Diagnosis and treatment of CD20 negative B cell lymphomas. Biomarker Research, 5, 5, February 2017. ⁴ Source: NHS England, clinical expert opinion		

Assumptions

4.2 The resource impact template assumes that:

- the adult population in England will increase in the next 5 years (please see resource impact template for more details).
- currently, all the eligible population are treated with R-CHOP
- in future practice, from year 2 onwards, 10% of the eligible population will be treated R-CHOP and the remaining 90% treated with polatuzumab vedotin with R-CHP.

- administration costs are based on [NHS national tariff 2022/23](#) SB14Z Deliver Complex Chemotherapy, including Prolonged Infusional Treatment, at First Attendance
- dosage per treatment cycle is based on body surface area (BSA) distribution in the POLARIX study.
- body weight is based on western population data in POLARIX study as preferred by committee.
- adverse event types and costs are based on company economic modelling.
- subsequent treatments are applied when a patient has progressed. Progression free survival at end of year 1 and at end of year 2 is as per company submission.
- supportive care costs are applied for patients in both a progression free survival state and in progressed state. Progression free survival at end of year 1 and at end of year 2 is as per company submission.

About this resource impact report

This resource impact report accompanies the NICE guidance on [Polatuzumab vedotin in combination for untreated diffuse large B-cell lymphoma](#) and should be read with it.

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